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By Denman W. Ross

THE PAINTER'S PALETTE. Illustrated.
ON DRAWING AND PAINTING. Illustrated.

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ON DRAWING AND PAINTING

ON

DRAWING AND PAINTING

BY

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PREFACE

In presenting this book to the public I want to say, at once, that it is not the book I hoped to write. As I thought of it and imagined it before writing it, it was much more interesting and much better written than it is. It is better written than I wrote it, however; thanks to Dean Briggs who has been reading and correcting my proof sheets. He has devoted many hours of a summer vacation to this labor of love, for which I am deeply grateful. I have had many helpful suggestions, also, from John Briggs Potter, a friend who does not always agree with me but nevertheless believes in me. He has been interested for many years, as I have been, in the study of the Set-Palette and its possibilities and we have exchanged ideas constantly. He has a profound knowledge of Italian Painting which he has given to me without reserve. I am indebted, also, to my devoted secretary, Edgar Oscar Parker, who has helped me at all times and in every possible way, with unfailing patience and intelligence.

In expressing my appreciation of assistance so generously given, I am in no sense shifting over to my friends any responsibility for this book. It is in every sense my book. Thinking of it at this moment, when it is passing out of my hands into those of the reader, I am alarmed to realize how much of myself I have put into it and to what extent I am giving myself away in publishing it. I have presumed to give the reader my views of Righteousness, Truth and Beauty, and I have not hesitated to make quotations from Plato and Aristotle: thereby suggesting that the reader is neither a gentleman nor a scholar. I have not only insulted the reader, in this way, but in another way: — I have said certain things, not once, but repeatedly; suggesting that the reader is like the undergraduate in college who forgets everything that is

not hammered in. The reiterations of this book, however, represent a deliberate though possibly mistaken attempt to give the book the tonality of a certain ideal, which I wanted felt, if not expressed, in every page of it. There are many digressions, too. For these I must apologize. They mean a want of skill on my part which would be taken for granted, no doubt, if I did not say so much about the importance of skill. I must ask the reader to forgive me for not living up to my ideal. In declaring it, I know that it is coming back upon me like a boomerang. I have sacrificed a good many things in order to write this book. Among other things I have sacrificed myself.

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INTRODUCTION

In beginning the study of any art we must learn what materials and terms are properly used in it and what modes of expression. Then we ought to have some practice in using the materials and terms and exercises in the different modes, following the example of the masters. This is equally true, whether we propose to practice the art as a profession or wish merely to understand and appreciate. Without some experience, without some technical knowledge and practice, our understanding is sure to be superficial and our appreciation limited. It is interesting to remember the passage of Aristotle in the "Politics," [1] where he says: "It is difficult, if not impossible, for those who do not perform to be good judges of the performances of others. . . . They who are to be judges should also be performers." If we have never been performers we deny this proposition, in self-defence, but if we have ever practiced any art we know that we are better critics and better judges, just for that reason. Aristotle does not say that it is impossible for any one to be a good judge who is not also a performer. It is difficult, he says, if not impossible. Nor does he say that the performer is sure to understand; he is simply more likely to understand than any one who has never been a performer. We know, very well, how many performers there are who do not understand, who have neither appreciation nor judgment, and we are willing to admit that certain persons, not many, are good judges though they have had no technical training. We may be sure, however, that they would be better judges if they had had some training.

Applying these general considerations to the particular art of Drawing and Painting, it will be argued that a great many people enjoy pictures who have had no practice in painting. That is true, but the appreciation and enjoyment of pictures

[1] *Politics*, VIII, 6. Jowett's Translation, p. 254.

by those who have had no practice is very limited. It is, first, a recognition of the subject painted as more or less interesting; second, a discrimination in types of representation with, perhaps, a preference for one type or another, and third, an estimate of the truth of the representation regarded as an imitation of Nature: but that does not mean much appreciation of the Art. To be good judges and critics we must consider not so much the subject as the treatment of the subject, what we call the composition or design and the workmanship. It is all very well to recognise the difference between one type of representation and another, to distinguish a Japanese print from a Florentine or Venetian painting and these from one another. This discrimination in the varieties of painting may go a long way, even to the point where we recognise the Ba-yen, the Matahei, the Botticelli, the Velasquez; being able to name the master when we see his work. It is one thing, however, to recognise the type of the representation and another thing to distinguish the masterpiece of the type. To be a good critic, a good judge, one must be able to do that. Lastly, it may be said that an appreciation of the truth of representation in pictures is no appreciation whatever of the art by which that truth has been set forth and expressed. This we understand very well in the field of Speech and of Writing. We do not regard mere statements of fact as contributions to the Fine Arts of Speech or of Writing. We have no hesitation in drawing the line between Statistics and Literature, but this is a discrimination often missed by the beholder of pictures who thinks he is a lover of Art when he is only a lover of facts and information. The question of Art is not a question of facts. That is a question of Knowledge, of Science. Science has to do with things. It is impersonal and universal. Art means "not things but thoughts." [1] What is the thought or idea? That is the question of Art. Given the same facts, the same information, to a dozen painters: they will produce a dozen pictures, no two alike. Which is the best?

[1] John Henry Cardinal Newman: *Idea of a University*, p. 274 *et seq.*

Which is the masterpiece? That is the question of Art. The art of Painting is not a copying of things seen. It is thinking about them in lines and spots of paint. It is not a description of objects but an expression of ideas. It is at the same time a technical performance. Newman says of the writer that he must be a master of the twofold Logos, the thought and the word, distinct but inseparable from each other. The same thing may be said of the painter. The only difference is that his thought is in the terms of painting and not in the terms of language.

The end and aim of Art is the attainment of excellence in thinking and in a technical performance. In Painting this excellence is only partly exhibited in the final result and effect. Good painting means good thinking followed by right actions in the process and progress of the work, from the beginning of it to the end of it. Of this no one is likely to be a judge who has had no experience, no practice; who cannot, seeing the result, understand how it was produced. Given a lot of examples, examples of a certain type of work, are you able to look them over and select the masterpiece? Can you do this and do it with a sure judgment, making no mistake? Very few people can do it. Very few people even try to do it. They are satisfied to recognise the type and they talk about it in general terms. They avoid in this way committing themselves to specific judgments. They are interested in pictures rather than in painting. Everybody talks about pictures. Many people give lectures and some write books about them. Very few of these people can tell you, however, with any sure judgment whether a particular performance is good or bad. It is only those who can do this who have any real knowledge and appreciation of the art. Art lies not in kinds of things, not even in the very best kinds but in the excellence achieved in some particular kind. As Mr. Henry James has said in the "Lesson of Balzac": "Nothing counts, of course, in Art but the excellent; nothing exists, however briefly, for estimation, for appreciation, but the superlative, always in its kind."

Is there nothing, then, in the Art of Painting but painting; nothing in painting but a technical performance? Am I forgetting the performer behind the performance, the painter behind his picture? Am I forgetting the life of the painter which he puts into his painting; his emotions and impulses, his impressions, his interests, his knowledge, his ideas; what he sees and imagines, his ideals and visions? No, I am not forgetting that. I know that Art is the expression of Life, that the life that is expressed by Art is the important part of it. There is nothing else, indeed, of any consequence. The life that is expressed by Art is all that we think about, all that we care for, in Art. I am not forgetting that but I am thinking how important it is that Life should be expressed. I am thinking how important it is that the artist should be able to express himself well when he tells us of the life that is his and not ours. He cannot do that without a technical knowledge and understanding of the art which he chooses as a means of expression. To express himself and do it satisfactorily he must know what materials to use and how to use them. He must know all about methods and processes; how to do this and how to do that, and why he does this or that. He must understand his performance thoroughly. With that idea he subjects his work to scientific analysis and explanation. He formulates theories about painting and tries experiments. He studies the tones of the palette. He considers every tone, every line, every spot which he puts on his canvas. He considers the effect he has produced and decides whether it is the effect he wants to produce or not. When he has produced a certain effect he must know how he has produced it, so that he can produce it again when he wants to do so. He must consider the composition or design, as it develops upon his canvas, to be sure that it is all right and as good as he can make it. He must have studied the Principles of Design and fine examples of Design so as to have standards in mind to refer to. He must be sure that he has a visual knowledge of objects, if objects are to be represented, a visual knowledge of the human

form if that interests him. Without a visual knowledge of objects he will be unable to draw and paint from his imagination. Unless he can do that he will be unable to rise from the particulars and accidents of vision to a conception of reason in a true idea. If he cannot draw and paint from his imagination he will be unable to bring his knowledge into the form of a single idea or into a good form of design. He will be tied down to the object or the model and will be quite unable to rise from the statistics of vision to a comprehensive idea. Before he can hope to express himself satisfactorily, the painter must study the different forms and modes of his art and the masterpieces of every kind. To learn how to express himself the painter must know how other painters have done it, especially how the painters have done it who have done it best. When it comes at last to the practice of the art as a means of expression the painter must follow closely the example of the masters until he can paint at least correctly, according to good precedents. Then, in due time, comes the expression of the personal life which I consider the aim and end of all this effort. In studying the works of other men we want to see what has been painted and we want to learn how to paint. Then we turn from the works of other men and think of ourselves and our interests. We have seen in the works of other men their interests, the lives which are theirs not ours. To do again what has been done, to express what has already been expressed need not be thought of. What have we to express by the art which we have mastered? That is the question. If we have nothing to express; no interests to unfold, no feeling, no emotion about anything in the world of vision, no visual knowledge of anything, no ideas, no ideals, no vision of things unseen which we should like to disclose; it is most unfortunate. We have studied the art in vain. We are able to express ourselves, to express ourselves well, perhaps, but we have nothing to express. On the other hand, we know the men and women who have much to express who are unable to express anything, just because they have not studied and mastered the art. They have interests,

ideas and ideals, no doubt, but how vague they are, how formless. It is pathetic, the effort which so many people are making in these days to express a Formless Life in a Formless Art. The effort perhaps is to be natural and artless. What it really means, however, is ignorance, confusion and vagueness in the world of ideas. Ideas cannot be said to exist until they are definitely formulated in the terms of Art. Until they are so formulated they exist only as potentialities. They lie in a confusion of sense impressions and vague imaginations. In this form or formlessness, they cannot be expressed and they are perfectly useless for the purposes of life. To be in this state of mind seems to most of us very undesirable. We all know what it is. We call it a "muddle" and we try to get out of it. There are people, however, who rejoice in a confusion of sense impressions and vague imaginations. It is "so natural." So it is. They tell us that it must be expressed in a way which will express it which, of course, must be perfectly artless. We see the result of this artless expression of human nature in the work of the so-called Post-Impressionists and Futurists. To some of us, and among them I count myself, it is a warning.

This is a book about painting, not a book about the life that is painted which may be worth painting or not as the case may be. It is a Grammar of Painting that I have written, with hints of something beyond; " with moral reflections unavoidably interspersed" as the showman said. It is a Grammar with many digressions, too many perhaps. It deals mainly, however, with the materials and the methods, the principles and the rules of the art. It calls for good workmanship, for good painting. It demands what Mr. Pater has called "the appreciation of intelligent workmanship in work and of design in things designed; of the rational control of matter everywhere." [1]

There are plenty of books to read about the Art of Painting; about the pictures produced by painters and about the painters themselves, their motives, ideas and ideals; but we

[1] Walter Pater: *Greek Studies*, p. 233.

look in vain for specific information about the materials of painting, about the ways, means and methods of production and the performances of painters. These performances go on in the seclusion of studios and the public knows nothing about them. The painters keep their secrets to themselves, if they have any. It rarely happens, that they tell their pupils how they do their work or allow them to see it done. The teaching of drawing and painting in the schools is little more than supervision, on the part of the teacher, of exercises in the imitation of casts, models and other forms of still life. A statistical accuracy is all that is required and all that is expected. The teacher says little or nothing about the choice of materials or about methods of using them. He has nothing to say about the different modes of representation or about the limitations and possibilities of these modes. He says nothing about the methods of getting a consistency in tone-relations or any other relations. He advises drawing but does not tell us how to draw. As for the problems of Design, they are entirely ignored. If you ask why this is so, the painter who teaches will tell you that these are things that every painter must find out for himself. The students in the Schools of Drawing and Painting proceed, therefore, with no knowledge or understanding of the art which they propose to practice, except what they get as they work on by themselves, imitating what they see in the cast or the model and making a sad mess of it, as a rule.

It is conceivable that the painters who teach in the schools are unable to explain the art which they practice. We are told that it is a painter's business to paint, not to talk about painting. Why, then, when he has nothing to say, does he presume to teach? A teacher must talk. I can understand how the painter may not have thought it out, how he does it, in the terms of language and may, therefore, be unable to explain his art, but I am sure of this, if he cannot explain his art he must not undertake to teach it. Some of the painters tell us how they try to paint without thinking about it. That is,

no doubt, the reason why they have nothing to say about it. If the painter follows the latest Philosophy of Art, he follows his instincts when he paints and refrains from exercising his intelligence. Having used certain materials, he uses them again and again, always the same materials. He must not think about his materials. Having used his materials in a certain way, he uses them in that way, repeatedly. He must not think about his methods. Thus he proceeds and never thinks of anything but the result and effect. As he paints without thinking about it it is quite likely that he has nothing to say about it. Having no ideas about pigments or about painting and no explanations to offer or recommendations to make he says to his pupils: "Go ahead; do it your own way. Learn to do it by doing it. Experience will teach you." The pupil is told how very dangerous it is to use his intelligence. He may use his eyes but he must not use his mind. The teacher says, "Don't think about your performance. Don't talk about it and don't listen to any talking. Above all things, don't read any books. Go ahead and paint. Paint every day and all day long. Keep at it and take the consequences." This is the point of view which is taken by most of the painters who teach in the Schools of Drawing and Painting and this is the advice which they give to their pupils.

When Degas was asked to explain his art which was supposed to be an expression of his instinctive impulses, an expression of "temperament and personality," he said: "No art was ever less spontaneous than mine. What I do is the result of reflection and the study of the great masters. Of inspiration, spontaneity, temperament, — temperament is the word, — I know nothing."[1] I am tempted to repeat also what the painter Renoir has said:[2] "The bad system begins in the Schools — I was in all of them and all were bad. The professors were ignorant men; they did not teach us our trade. Even to-day I do not know whether my pictures will last. When I have noticed

[1] George Moore: *Impressions*, p. 313.
[2] *Scribner's Magazine*, May, 1912, p. 614.

them yellowing, I have tried to find out the cause. I have changed the colors of my palette ten times and I cannot be certain yet that I have arrived at a choice that will yield a permanent result. Now this was not always so; it is only since the Revolution that the principles of the old masters have been swept away. Look at Nattier's pictures — how well they are preserved; then look at what follows and you will see what I mean. The old masters were taught each step of their trade, from the making of a brush and the grinding of a color. They stayed with their teachers until they had learned well the ancient traditions of the craft. And the tradition has never been an obstacle to originality."

Painting is a scientific practice. It is a way of doing things which must be understood and mastered. The life which the painter expresses by painting, when he has mastered the art, may be intensely emotional and personal or it may be severely intellectual, with nothing personal in it. When the speaker or writer has mastered the language, by scientific methods, by the analysis of examples and by experimental practice, he proceeds to talk or to write. The result is the expression of personal feeling and emotion or of impersonal knowledge and understandings, according to the character and disposition of the speaker or writer. So it is in painting. The Art must be mastered before it can be successfully used. It is mastered by scientific methods, by the analysis of examples and by experimental practice, and it is the business of the teacher of painting to help the student in this study of examples and this practice as far as he can. If he cannot do that he should give up teaching. He does not earn his pay when he tells his pupils to teach themselves.

When we really know and understand the masterpieces of the art and take up the practice of the art as a profession we must begin, modestly, by following the practice of the masters, following it closely as we possibly can until we can do it easily. In doing that we shall acquire habits which as they become settled will become instincts. We may then be able to follow

our instincts just as some of our painter friends would have us follow them, but it will not be "without intelligence." That is to say, we may be able, when we have learned to paint, to go ahead and paint without thinking about precedents, principles or rules, having them all well fixed in the region of subconsciousness. That is just where they should be, of course, if we can only get them there. In the meantime we should have no fear of any kind of knowledge and no hesitation in trying to understand, but always a perfect confidence that it is only through knowledge and understanding that we shall master the art and be able to do anything in it worth doing.

It is my purpose in this book to tell the reader what I have learned about Painting by the study of pictures and what I have learned about Design by the study of designs; also what I have learned by the practice of painting. This practice has gone on for many years but it has been a strictly experimental practice, my object being, not to produce designs or pictures but to understand Design and Painting and to appreciate excellence in these arts. I have no idea that the professional painters who teach in the schools will read this book and they will, no doubt, without reading it, warn their pupils not to read it. I find a very vigorous opposition to my teaching among those who know nothing about it. They deny my propositions without knowing what they are. I can see the negation upon their lips long before I utter the propositions which they will deny. They are so very sure that the artist must proceed in his art by instinct without understandings that they are unwilling to consider any understandings, even to know what they are. I need hardly say that this book is not written for those who will not read it. It is written for the professional painters who are serious students of painting and have no fear of knowledge. There are many painters, I am sure, who want to understand the art which they practice and are ready to read any book which is at all promising. They may not find in this book what they want. They may not agree at all with its propositions, but they will not judge it without

reading it. This book is written for the professional painters who welcome any attempt, however inadequate, to explain the art which they practice. It is written, also, for the teachers of Drawing and Painting in the public schools, in colleges and in universities, who, following academic precedents, feel bound to explain what they undertake to teach. I hope that this book may be helpful to them. I am one of them.

The illustrations of this book will not be found on its pages. They will be found in the masterpieces of the art to which the reader is constantly referred. It will be an interesting and profitable exercise for the reader to put this book away and look for the illustrations it requires. He will find them in the Museums of Art. He will find no end of illustrations of the different modes of drawing and painting which I have analyzed and described. If he is the serious student he ought to be he must not be satisfied until he has discovered among many illustrations the best. As I have said, the study of Art does not mean recognising the kind but discovering the masterpiece. I might have introduced a few photographs of the masterpieces I have discovered but I should only be giving a few illustrations when many are required and I insist that photographic reproductions are not satisfactory. The student of painting who knows its masterpieces only in photographs does not know them. He should turn constantly from the pages of books, from plates and photographs, to a study of the objects themselves. He must get his knowledge of art from works of art. He must turn to the collections of the Museums. When he has seen the real things he may turn to photographs of similar things which he has not seen and he may then be able to imagine the objects through the photographs of them, but he cannot do this studying photographs only. I object very much to the explanation of Theories of Art by illustrations which are not Works of Art. The proof of our theories is found only in the works which they undertake to explain. It has been my constant endeavor, in teaching, to illustrate every point, every idea, every kind of performance,

so far as possible, by original works of art. I have used photographic illustrations only when it has been impossible to get anything better.

The teachers of art in the public schools, having no works of art to show, only a few photographs and casts, perhaps, are obliged to illustrate what they have to say by their own drawings and paintings or by a selection of work done by the pupils. This is most unfortunate because by these examples they show only what the kind of thing is that they are talking about. They do not show what is excellent of the kind. The result is that the pupils proceed with no high standard. They imitate the work of the teacher or of other pupils who are only a little more successful than themselves. Magazines are published for teachers in which the arts of Drawing, Painting and Design are explained by illustrations made by the writers of the articles. They are perhaps able teachers who know much more than others and do much better work but the standard which is held up is not at all the standard which ought to be held up. This is found only in the work of professional draughtsmen and painters who are masters of the art. It would be a very proper service on the part of the editors of magazines for teachers and students, to devote themselves particularly to the work of publishing really good and satisfactory reproductions of masterpieces in different types of work; but these reproductions should be used, as I have said, where original works of art cannot be shown or to supplement them. The teacher of Art is first of all a showman and his talking and writing about Art is without effect if he cannot show us what Art is. He does that only when he is able to show us what is excellent as well as what is typical.

A knowledge of the types of Art is not a knowledge of Art. The knowledge of types is a knowledge of industry and its products. The distinction must be clearly drawn between Industry and Art. Industry means doing things: Art means doing them particularly well. In view of our classification of occupations and industries as more or less respectable it is

very important that this difference between Industry and Art should be understood. According to this classification, a man who paints a bad picture is more highly esteemed than a cook who produces a good dinner, which is perhaps a masterpiece of the art of cookery. According to this way of thinking a man is distinguished by his occupation much more than by the character of his work, whether it is good or bad. Thus it becomes the ambition of every one to get into another and a higher type of work rather than to achieve excellence in what he happens to be doing. It means, also, that as we pass from one occupation to another which is esteemed higher we never stop long enough in any one to master the art of it. When a man does anything well he is immediately promoted to a superintendence over those who do it badly, and those who superintend do nothing else until, successful in superintendence, they are promoted to the management of the business. Almost all the ability and talent of the country is thus absorbed in the problems of organization, management and control. The arts of organization, management and control are very ably practiced but very little ability is left in the Arts and Crafts. The product is, therefore, a product of Industry not of Art.

We shall never have any Art, any more Art, as long as the public discriminates only in types of work and does not recognise the differences between good work and bad. Our public is perfectly satisfied when it sees a building which has a pediment and a colonnade and moldings of a certain type. No matter how bad the building really is, as an example of Classic Architecture, it is approved as such. As long as the public is satisfied with the representation of the nude in sculpture, or the draped if that is the preference, and does not discriminate in instances the Art of Sculpture is unrecognized. When a lady tells me that she loves water-colors I am perfectly sure that she is not a lover of Art. A preference for oil painting on her part would not move me. The same lady tells me how she loves everything out of doors. This expresses very well the love of the public for types of satisfaction, for types of pleas-

ure, rather than for particular instances. The appreciation of Art means, always, and everlastingly a discrimination in particular instances and a selection of the best.

The interest of the public in one kind of thing is soon exhausted and an interest in something else takes its place. The interests of the public are thus passing interests. We call them fashions or fads. The interest of the public in one kind of thing never lasts long enough to become a discriminating interest. By the time people begin to distinguish what is better or what is best the interest in that kind of thing passes away. The producer has no time to learn how to do anything well. The interest in it passes and he must learn to do something else. The interest passes long before any real excellence or perfection can be achieved. The public might learn to distinguish excellence if its interest in one kind of thing could be maintained for any length of time but it is not so maintained. In times past when the same thing was done year after year, through decades and even centuries, just that thing and nothing else, the public, having no thought of new types and new interests, slowly learned to distinguish excellence and to appreciate it. There was a demand for excellence which does not now exist.

The objects which we see in the Art of the Past, which we collect and admire when we are artists and lovers of Art, were produced in long periods of time, not by individuals but by successions of individuals, absorbed in doing one kind of thing, just that and nothing else. Doing something else was not thought of. There was a trade system if not a caste system which did not allow any one in one occupation to pass to another. Certain types of work were more esteemed and respected than others, no doubt, but there was no "getting on," as we should say. Everybody, having his work to do, went on doing it. The result was that there was no distinction for any one except in excellence. His only chance of rising in the world was in doing his work better and better. Now, however, we rejoice in the abolition of all barriers to promotion; we

rejoice in the equal opportunity which every one has of getting on if he can, if he is "smart" enough; but we have paid very dearly for this equal opportunity for everybody, this "Liberty" as we call it. It is much easier, particularly here in America, to change our occupation than to attain to excellence by persevering in it. So everybody is in transit and nobody is doing anything well. I am speaking, of course, of the Arts and Crafts.

There should be established in each profession or art a standard of technical excellence. The standard should be established by those who, doing a certain kind of work, know how it should be done. There is no such standard nowadays or if there is one it is disregarded. The individual is perfectly free to follow the standard of his profession and trade or not as he pleases. He is very apt not to follow it, particularly if it is a high standard and difficult to live up to. The painters, for example, who ignore or cannot rise to the standard of the profession are sure to turn for sympathy and support to the public, for it is very easy to enlist sympathy and support where there is no standard and no predisposition to be critical. The public is very good-natured. It is willing to accept almost anything that is offered in the right way and properly advertised. So the painters who find it difficult or impossible to live up to the standard of their profession instinctively turn to the public for support and there is hardly one of them who cannot get it if he goes about it in the right way. No matter how badly he does his work there is surely somebody who will like it. No matter how badly he paints there is a market for his pictures, if he can only find it. When it comes to that, there is an auction room with the light turned on and a persuasive speaker and a crowd of admirers for every canvas. The painter, turned down by the profession, rejoices in the freedom of the people to judge for themselves and buy what they like. As long as the public is the judge of Art we shall have no Art, for the public, as I have said, discriminates only in types. Of excellence and perfection it knows nothing.

If standards are to be established and maintained, this must be done by the professions and trades: but the professions and trades are, most of them, quite unwilling to establish any standards except of wages and of hours. That means, perhaps, an interest in the working-man but it is not an interest in his work or his art. Think of saying to an artist, "If you cannot get so much a day for your work stop and do nothing." Think of saying to an artist, "When you are at work, look frequently at the clock and stop on the hour." The excellence by which Art is distinguished from Industry is not achieved under these conditions.

We rejoice in the idea of a fair and equal coöperation in all things. We take the greatest satisfaction in seeing people combine to get the things they need and to do the things they want to do. We see in this idea fraternity and equality and a very proper division of responsibilities and of profits. Coöperation has become an ideal to be realized everywhere, in all enterprises and undertakings. When we think about it, however, what seems like coöperation and suggests fraternity and equality and all sorts of nice things, is really a most unfortunate confusion of minds and dispersion of responsibilities which ought to be concentrated. It involves all kinds of compromises: between ignorance and wisdom and between right and wrong. One man's opinion or judgment is as good as another's and all questions are settled by a majority of votes. The expert, the only man who knows what to do and how to do it, is generally outvoted and turned down. In order to accomplish anything he must stop work and become a teacher. He must educate the public. That is the thing to do, of course; but long before the public is educated it passes away and another public takes its place as ignorant as the first. In the mean time the expert and teacher dies.

It is only when those who coöperate have common sense enough or wisdom enough to put the whole undertaking into the hands of the expert that anything can be well done, as a work of art. For Art we want experts in every field of

thought and activity, experts in full control, but our chance of getting them where we want them is not good. Our system of Government by the People, of Control by Corporations, by Managing Boards, by Committees, is absolutely preventive of Art in any field. The worst of it is that there is no incentive for any one to become an expert. The expert, who alone produces the work of art, has no prominence, no distinction, no proper satisfaction or reward. His conclusions and judgments, his advice and recommendations, carry very little weight and settle nothing. The Committee, the Governing Board, the Corporation, the Public, certainly know best. Under these conditions we shall presently have no experts, no artists. Equal coöperation, as I have said, means a confusion of ideas and a dispersion of responsibilities. It means compromises between ignorance and wisdom, between right and wrong. It means constant failure. There is an art of coöperation which is to coöperate amiably, acquiescing and making no trouble, but it does not help matters.

The idea of Coöperation is often connected with the idea of Representation. Those who coöperate, the Public, the Corporations, the Governing Boards, and the Committees, are supposed to discover the expert and put him in his place. The idea is to give him the responsibility and trust him. He is to be encouraged in his efforts and suitably rewarded. The success of the expert, thus distinguished and trusted, is everybody's success. It is a delightful idea. The only difficulty about it is to discover the expert. *Ce n'est que le premier pas qui coûte.* Unfortunately it takes an expert to discover one. Our representatives are no more expert than we are. Why should they be when they represent us? The expert represents himself, not the public which is ignorant and not at all expert. The idea of Representative Government is quite as illogical as the idea of Coöperation. There is an Art, also, of Representation. It is the art of satisfying those who are represented, but it does not help matters.

By the division and subdivision of labor in almost all occu-

pations nobody produces anything, only a part of something: the raw material, perhaps, or some particular part of a product which is in no sense any body's work when it is done. Under these circumstances the working-man has little or no incentive to excellence and has no possibility of becoming an artist. He is a machine to be used until he is no longer useful; and then to be cast aside. There is no satisfaction under these conditions for hard work and long hours, unless the hard work brings high wages and the hours of labor are shortened so that the wages earned may be enjoyed. To accomplish these ends the working-men have combined in trade unions the object of which is higher wages and shorter hours. That is all right, of course, but it does not help the cause of Art. Art, indeed, is impossible under such conditions.

The work of art can be produced by machinery and by men working like machines, if the machinery and the men are under the control of one man and that man is an artist. The use of machinery is not at all inconsistent with the production of works of art, but the control of the machinery and of labor must be in the hands of the artist. He alone knows what to do and how to do it. The capitalist who owns the machinery and hires the men who work like machines knows very little and cares very little, as a rule, about the articles produced or the methods of production. The idea is simply to produce the kind of thing that the public wants to buy. The product never rises above the standard which the public requires. The motive of the Capitalist is to do business. It is the Capitalist who is doing the work in these days, not the artist. Somebody says that "business is the heart of the Nation." I guess it is. In that case there is little hope for Art. We have a vast population engaged in dull routines in which no one excels and no one is distinguished. The only difference between one man and another is that one is industrious and cheerful (bless his heart!) while another is lazy, shiftless and discontented. There is no chance for superiority, no chance for excellence and no idea of it. What is worse, there is no desire and no demand for it. The

majority of our people neither produce works of art nor want them. They are perfectly satisfied with the kind of thing they have in mind, whatever it is. The best of the kind is not thought of. The division and subdivision of labor for the sake of wealth is producing Wealth but preventing Art. We make enough money but nothing worth looking at.

The trades union, which, under other conditions, might be an organization for the advancement of special knowledge, of special training and skill, which might be almost wholly concerned about the establishment of standards and the attainment of excellence in a certain type of work, which might be wholly absorbed in trying to solve the problem of doing better work, better service, for the public, is, in these days, an organization with an altogether different purpose. It is a business organization. Its aim is to get the highest possible price for the work which is done, whether it is well done or not. It is well understood that the majority of workers are not at all helped by any surpassing excellence of the few. The man who can do more work or better work than his fellows must be suppressed. If not suppressed, he will be preferred and there will be no support for those who are less intelligent and capable. These last, being in the majority in every case, the Trades Union means the prevention of every kind of superiority. The object is to secure a survival for everybody; however unfit to survive. Art, therefore, being nothing but Superiority, has no chance whatever.

Wealth as it is concentrated in great fortunes is almost as serious an obstacle to the progress of Art as the conditions of labor and the character of its unions. The rich man is almost sure to become a collector and "Patron of Art." It is expected of him. Being that kind of man he is expected to do that kind of thing and he does it. There is hardly a rich man in the country who does not collect works of art. To be a good judge the rich collector should be a performer but he seldom is a performer. He might be a performer because having wealth he can do anything he pleases and having no

need of money he can devote his energies, better than any one else, to the attainment of excellence and perfection, but the rich, it seems, have even less leisure than other people. It is a pity, for "leisure is the bottom of all good things." [1] Not being performers, the rich collectors are not, as a rule, good judges of the works of art which they collect, and they are constantly imposed upon not only by dealers but by those who call themselves artists and produce "works of art" expressly to please them. As a rule, the dealer takes the initiative. If the rich collector has an interest in "old masters," the dealer produces them, in almost unlimited quantities. If the collector prefers modern pictures by painters of reputation, they are produced; the pictures and the reputations also. The dealer proceeds by carefully and well-tested methods of advertising. The price of a certain kind of picture or the work of a certain master is seen to rise steadily. The attention of the rich collector is called to this "fact" and being, as a rule, a good business man, he is persuaded that the purchase of certain pictures will be a good investment. It is said the public is already "getting onto it," so in a very short time these pictures will be unobtainable at any price. If the painter should die, the value of his work will, of course, advance far beyond present prices. "Now is the time, now is your chance," says the dealer, and the millionaire buys. The dealer also becomes a millionaire. It is a great business: dealing in works of art. It is unnecessary to consider the "works of art" which are thus advertised and disposed of. It is enough that there is a market for them and the prices are going up. The profession protests, but who cares for the profession or its judgments. What are they but envy, hatred and malice, and all uncharitableness. The rich collector has been abroad. He has travelled everywhere and seen all kinds of things. He certainly knows what he is about. Think of his fine house and all the "splendid objects of art" which it contains: the furniture, the carpets, the tapestries and the pictures, the por-

[1] Aristotle: *Politics*, v. Welldon's Translation, p. 226 *et seq.*

celains and the bronzes. The man who has those things is, of course, a judge of Art.

The artist and lover of Art is at first amused to see the ignorant helping on the ignorant, the blind leading the blind, but if he thinks of it seriously he sees how hopeless it is, under the circumstances, to expect any real appreciation and any proper practice of Art; any real advancement in understanding or in achievement. He sees a vast and increasing population wholly absorbed in the struggle for existence, knowing nothing of Art and caring nothing for it. He sees an increasing number of very rich men collecting works of art, not because they care for them but as a means of luxury and ostentation.

The artist, who alone understands his art because he has practiced it, who is a good judge because he is also a performer, who has studied the masterpieces of his art, analyzing, comparing, selecting the best, judging with more and more unerring judgment; who is trying to put all the knowledge of his art that he has gained by study and hard work into his practice, with no other object than to do his work well and then to do it better and at last to do it with an inimitable perfection; this man, who alone has the knowledge, understanding and appreciation of Art, is out of all this business, entirely out of it. The dealer has no use for him. He knows too much. The painters who are in with the dealers have no use for him. He paints too well. He has no public and no support. There is no support nowadays for those who look after their work and do not look after themselves. Art is the most delightful occupation under the sun and the meanest business.

What, incidentally, concerns the artist and the lover of Art is the repainting of important pictures to bring them up to the standard the rich collector has in his mind as a proper standard for pictures. The lover of good painting sees the pictures which he longs to study utterly spoiled except for the purposes of display. Even the museums, where the trustees are many of them these same rich collectors, feel that they must bring their pictures up to the standard required for a handsome

show. Thus the world's masterpieces, which are for the artist and student of art the chief source of instruction and information, are destroyed. At the same time there is a large production of forgeries. The prices which are paid, even for spoiled originals, are so high that the temptation to make imitations is irresistible. The dealers (only the very lowest class of them, of course) are constantly looking about to find people capable of producing "old masters." There is a steady demand for good forgeries and very high prices are paid for them. They are produced in almost every branch of Art. We see them everywhere. The rich collectors are easily imposed upon, except the very few who have learned by bitter experience what kind of thing to avoid, what not to buy. Even the practiced artist is often imposed upon by the wonderful skill which has been developed by this demand for excellence and perfection in forgeries. It is almost the only demand for excellence which exists and persists. It is easy to take an old picture and make it look handsome. A good deal of cleaning, more or less repainting, a lot of varnish and a new frame will do wonders; but it is not easy to produce the thing when you have to start with a new canvas which has to be made old before you begin to paint on it.

There are of course, dealers and collectors to whom these criticisms do not apply. There are dealers and collectors whose only aim is to know what is best in Art and to get possession of it. Very few of these dealers and collectors practice the arts in which they are interested but they spend their lives in the study of works of art, observing, comparing and passing judgment. In so doing they come by degrees to distinguish and appreciate what is best. They get judgment by passing judgment. With technical knowledge and practice they might get on still further, to still finer discriminations and unerring judgment. They are really serious students, however, and must not be classed with those who pretend to knowledge and understanding which they have not and never can have. Good judgment is not easily acquired. It means

years of devotion and hard work. It means a professional interest in works of art and a professional ability to judge them. We call it connoisseurship. When those who have this interest and this judgment collect works of art, whether as dealers or as collectors, a service is rendered to the cause of Art which cannot be overestimated, but the dealers and collectors of this type are so few that what I have said of dealers and collectors in general cannot be very far from the truth.

Art seems to be disappearing in a vast movement of unwilling Industry which is not a movement of Art. The saddest thing of all, however, is the passing away of the contentment if not the happiness of those who, absorbed in their work, are trying to do it well. There is nothing like a definite occupation and with it the love of excellence and perfection. The happiest person in the world is the artist, when he is absorbed in his work and trying to do it as well as it can be done. I must quote Aristotle again, — the passage in the "Politics" where he says, "If happiness is to be defined as well-doing it is the practical life which will be best."[1] The artist is not supposed to be a practical person. The public has a very different idea of the artist, but the public does not understand. Nothing is so practical as Art. It is, indeed, the only practical thing in the world, for it means not only doing your work, whatever it is, but doing it well, as well as it can be done. Art being Excellence means a real success in every undertaking, whether it pays or not.

The Love of Excellence and Perfection has never, perhaps, been so wide spread as it was in Old Japan. It expressed itself in all the acts of life: in behavior, in politeness and in all branches of industry, high and low. There was a standard in every art and profession, a standard which was upheld and maintained, often at a great sacrifice of other interests. The problems of convenience and comfort were ignored and unsolved and the opportunities which Wealth affords were unthought of. There was no wealth. Order and Decorum

[1] Aristotle: *Politics*, IV. Welldon's Translation, p. 171.

were far more esteemed than any kind of comfort or luxury. It may be said that the Old Japanese found in Excellence and Perfection, in Order and Decorum, the chief satisfactions of Life: until Commodore Perry arrived. The World was then introduced to Japan and Japan to the World. There was an immediate exchange of ideas and ideals. It cannot be said that we have become more like the Japanese, as a result of fifty years intercourse with them, but the Japanese have become very much like us. The exchange of ideas and ideals has been very one-sided. Instead of imitating the Eternal Order of Things and producing more pure and unadulterated art than any other people of modern times, the Japanese are now turning with eager interest to the spectacle of European and American life and the Variety Show which is disclosed. They are told that it means progress and civilization and they are persuaded of this. It is a most unfortunate conversion, for we have nothing, I am sure, to offer to the Japanese, to console them for the loss of their arts, but unsolved problems in Government and Economics, a serious if not hopeless conflict between Capital and Labor, confusion and disorder in the world of ideas and ideals and a very general unrest and unhappiness. When a people are absorbed, as the Japanese were, before the arrival of Commodore Perry, in the Love of Order and the Sense of Beauty and in the effort to achieve Excellence and Perfection in all kinds of work, they were happily passing the time away and life was worth living because it seemed so. Everybody had his Art and by his art he was mainly governed. In his Art he found his happiness.

To be governed by one's work, if it is honest, is the best form of Government. When we are absorbed in our work, whatever it is, when we are interested in its problems and ideals, when we are trying to achieve excellence and perfection in it, we are very well governed. If, working in this spirit, we can live and support our families we are not only well governed but rich. We are rich, not in having much, perhaps, but in wanting very little. The Japanese, before the arrival of Com-

modore Perry and their unfortunate acquaintance with us had this simple life devoted to Art and this kind of prosperity. In exchange we are offering them a Government of the People by the People, with Wealth for those who can get it and an All-Round Education for those who can afford to pay what it costs. This seems like a great offer on our part, but let us consider it for a moment, what it really means. Let us consider what it is that we offer the Japanese in exchange for a simple life devoted to Art.

There is nothing more attractive than the idea of popular government. It suggests a knowledge and understanding of everything by everybody and a highly honorable responsibility for everything by everybody. It necessitates an All-Round Education for everybody, an interest in many things if not in all things. Our education and training must, of course, prepare us for the responsibility of governing others as well as ourselves: others particularly. What we call "self-government" means a control of other people more than ourselves, so it is very important that we should be prepared for this responsibility. Personal interests must be postponed; we must be prepared for citizenship first, for private business afterwards. We go to school and then, if we can afford it, to college, with the idea of getting universal knowledge and a large and comprehensive understanding of affairs, so necessary for the practice of citizenship. Incidentally we get some practice in Speaking and Writing, but those are almost the only arts in which we get any technical training. As they are practiced not as arts, but as means and instruments of learning, the technical knowledge we get of them does not amount to much. By studying many subjects and practicing nothing but Speech and Writing, and these as a means and not as an end, we get through our education with no knowledge of Art. The knowledge of Art means a practice of Art. It means doing something and doing it particularly well. We do nothing but talk and write, and we do not do that as well as we might if we had a more systematic training and were thinking of excellence of

form as well as of matter. Thus we become citizens with no conception of Art. It is the only thing, perhaps, that we know nothing about. If we have been to College we recognize the existence of certain arts, the so-called Fine Arts: Poetry, Music, Architecture, Sculpture and Painting. We have heard lectures about them and read the books. We know the types, perhaps, and the masters, but that is all. When it comes to specific instances we do not know the good from the bad. We love Poetry, Music, Architecture, Sculpture and Painting, we love the Fine Arts, as my lady loved "everything out of doors." Never discriminating in instances and having no serious practice we have no real understanding, no appreciation, no judgment. Our All-Round Education, as we call it, gives us a "speaking knowledge" of many things. That is just the kind of knowledge, of course, which is required for our practice of citizenship. It is just what we need in Public Assemblies, in Governing Boards and in Committees where we must talk about things, whether we understand them or not, and be sure to vote. That is what we are there for. The terms of language which we use are general and not particular so our ignorance of particulars escapes notice.

Nobody's responsibility is very great, however. The responsibility lies, not with the individual but with the majority which is constantly changing in its personnel. That relieves even the majority from responsibility. We do not yet know what the government of a majority may prove to be. It may, in experience, prove to be the very worst form of despotism that the world has ever known. Not only is the majority inevitably ignorant of the things it considers but it is, as I have said, quite irresponsible. What is everybody's business is nobody's business. Being in all cases ignorant and without specific understandings the majority acts not intelligently but emotionally. That being the case it is quite as likely to go wrong as it is to go right: more likely to go wrong, I should say, for there are many wrong ways and only one right way. If the majority goes right we rejoice, but if it goes wrong

the situation is perfectly hopeless. There is nothing to be done. Assassination is not to be thought of. Education is impossible. Your majority is dead long before you can educate it and there is another one quite as ignorant in its place. In the mean time the educator is dead. The majority dies but is never dead. It goes on forever and forever, always ignorant and always irresponsible.

Having, therefore, no serious responsibility, the responsibility being shared by so many, the individual is free to turn from his duties as a citizen to his own private interests, to his business and to his pleasures. If he is not completely absorbed in business, as most people are, he may take up and follow the various interests which he has acquired in his all-round preparation for citizenship. If he has been to college he is well prepared to enjoy Life as an entertaining spectacle. The Spectacle of Life in our Democracy is interesting and exciting as never before. Seeing things is so much pleasanter than doing things. It is so much pleasanter and easier to witness the performances of others than to perform ourselves. To see others getting over difficulties is almost as good as getting over them ourselves and much easier. We see just how they do it and we feel as if we were doing it ourselves. We understand and appreciate, or think we do, and we have all the satisfactions of success with no effort whatever on our part. We become complacent and self-satisfied observers. We go to all the shows and take an active interest in everything that is going on. With a cheerful disposition we are always delighted. If we are dyspeptics or pessimists we take satisfaction in the folly and failures of others. In any case we enjoy ourselves. Schopenhauer tells us that we must not pretend that it is Paris we enjoy: it is always and inevitably ourselves we enjoy.

Life is a show of many varieties. There is something in it for everybody; even for those who, leaving school at the end of the grammar grade, have missed the advantages of the All-Round Education and Preparation for Citizenship. There

are high-class entertainments and very low-class entertainments. You can take your choice. It is true that these varied entertainments interfere with one another, and the cultivated gentleman who loves good Music, or thinks he does, is annoyed, when he is listening to the last strains of Tristan and Isolde, to hear a rag-time in the street outside. Those who frequent the Art Museum are very much annoyed to run across the rude crowd which is going to the baseball game. The varied interests and amusements of the Show do very seriously interfere with one another. It is Education, again, that is needed; that panacea of all evils. It is a case where the many must be educated by the few; but the many are soon many more and the few are only a few more; so nothing is accomplished and there is no help for the disorder and mess of it all. It is all very exciting, however, and there is something in mere excitement. It is vastly more interesting, surely, than returning to the dull routines of work and to the hard and sordid ways of business. Even the artist who is supposed to love his Art as he loves his life loves the Show more than his Art, when he has once experienced the delights and excitements of it. It is with great satisfaction that he decides that the artist must see as much of Life as possible. With this idea he is easily persuaded to go about more and more and to work less and less. The less he works the less he wants to work. If he is a painter he comes very easily to the conclusion that if he paints in the morning for about two hours, that is enough. He must not keep his sitter longer than two hours and he cannot paint when he has no sitter, so he paints for two hours a day and goes about the rest of the time. If his dealer does his duty and hustles, he may get as much for two hours' work as Rembrandt got for the best picture he ever painted.

Life is much more interesting than Art. Of course it is. Life is the subject-matter of Art. The Discovery of America was nothing to the discovery of Life as an object of interest, as a spectacle, and it is a new discovery. Up to this present time people have been a part of life. Being in it they have had no

chance to know much about it. Everybody had his part to play and there was nobody to see the result; the vast consequences of it all. A few people talked about it and a few people wrote books about it. They were called Philosophers. An interest in the whole world of people and things was called Philosophy, but the philosophers were few and nobody paid much attention to what they had to say or read their books. The philosophers were an *élite*, all to themselves; a select few looking on while others worked. All this is now changed. Nobody wants to do any work if he can avoid it. Everybody wants to be a spectator of Life, a spectator if not a philosopher. In view of this new interest in Life work appears to be an unmitigated evil, to be avoided, if possible. The one thing needed and desired is an income which will give us the pleasure of going about and seeing the world of people and things. It is inspiring just to read the advertisements. We can have a whole day at Revere Beach for seventy-five cents, and if we can only get seven hundred and fifty dollars we can go abroad for the summer. Think of that! There is nothing so delightful, perhaps, as having an automobile in which we can get about so easily and see everything. It is a pleasure to go anywhere, no matter where, as fast as we can, just for the excitement of it. An automobile costs more than a trip to Europe, but it is something to work for and to live for. So when we are supposed to be hard at work we are thinking, not of our work but of the day at Revere Beach, of the trip abroad or the joy rides which will be the reward of it all. With these ends and ideals in mind we settle down to work just like machines. We work not at all as the artist works, but automatically; thinking as little as possible of the work we are doing, and as much as possible of something else. Our interest is not in our work, not in doing it well, but in getting it done and escaping from it; escaping into the wonderful world that lies outside of it, a world in which all desires are satisfied for money.

Life is the very Biggest Show on Earth but it costs money to get in. There is the difficulty. For most of us the situation

is very trying. To go to the Show we must give up our work, and if we give up our work we cannot go to the Show. In the desire and effort to get money, wealth if possible, we employ labor, the labor that wants money just as much as we do and for the same reason: to escape from work. We give labor as little as possible of its proceeds and take for ourselves as much as possible. If we can we monopolize the land, machinery and other agents of production. Thus we add interest to other earnings. In that way we get way ahead of others. Then Labor oppressed by what is called Capital, which is an accumulation of interest and profits, rebels and there is a war between Labor and Capital. Looking after its rights Labor forgets its work and its duties; if it has not already forgotten them. Work, indeed, is neglected as much as possible by everybody everywhere, more and more, and there is no thought of achieving excellence or perfection in it. That is no longer expected. It belongs to the old order of things. It does not belong at all to the new order which is no order but rather disorder; disorder here, there and everywhere, disorder with a wide spread discontent and unhappiness. This unhappiness is due, mainly, to the fact that comparatively few people, after all, get money enough to give up work and go to the Show. Most people have to stay at home and work. Looking up from their work they see other people going about everywhere, riding in automobiles, going abroad and having a good time. It is very irritating, and what is particularly irritating is to have the pleasure-seeker calling out to you and telling you to stay at home and do your work and find your pleasure in your work. As if anybody was ever persuaded by pleasure-seekers to give up pleasure-seeking! We must give it up ourselves before we ask others to give it up.

Very few people, after all, are having a good time. Most people are having a horrid time, looking after their rights and neglecting their duties and never getting the pleasures they want. The pleasures we have are never those that we want. The pleasures we want are those that our neighbors have.

For anything like real happiness we must become artists and lovers of Art like the Old Japanese.

We have influenced the Japanese and turned them away from the simple life devoted to Art. We have converted them from this life to other things, more alluring, perhaps, but not half so good. Suppose, now, we give the Japanese a chance to convert us. We have influenced them, not at all for their good. It is time for them to influence us. It is not the influence of Modern Japan we want. It is no better than our own. It is the influence of the Old Japan we need. If we want to know how people may be governed by Art we must look back into the Past History of Japan; to the time when almost every one was governed by his work and by the ideals he found in it. Absorbed in his work and in the effort to achieve excellence and perfection in it he was, as a rule, a quiet and peaceful citizen. No policeman was needed to club him and there was little or no occasion for legislation to keep him in order. There were no theories about good government and no occasion for popular assemblies. There was no need of governing boards or committees. There was no need of wealth because there was no known way of spending it. There was no occasion for the division and subdivision of work because there was no need of wealth. Excellence and Perfection were more appreciated than quantity in production. One good thing was preferred to many bad things. The standard was one of quality not of numbers or quantities. The appreciation and enjoyment of single instances prevented the desire for many. To enjoy many things is impossible, and no people have ever understood that so well as the Japanese understood it; until we took the understanding from them. When any work was to be done the man who could do it best did it; as a matter of course. The masters were known and recognized. The untrained and unskilled had no chance, none at all. To be untrained, unskilled, was to be good for nothing. Those who were good for nothing died, no doubt. There were no philanthropists or philanthropic organizations. Philanthropy means

a strong interest in other people's lives with the idea of improving them. There was no such interest. The idle and incompetent, continuing to live, were a burden upon their families, not upon the public. The people who looked after them knew just how idle and incompetent they were. There was work for everybody to do. Each man did what his father did before him, as a matter of course. Inheritances were not of wealth but of skill. The tradition was of ideas and ideals. There was no desire either to change places or to rise in the world. Nobody thought of such a thing. The life of the family went on unbroken by discrepancies of occupation, of rank, or of fortune. Men were not turned into machines in the interest of efficiency and wealth. Wealth had no power to monopolize anything because there was no wealth. The face of Nature was unspoiled by the establishment of degrading forms of industry. The Love of the Beautiful was universal. It was not a monopoly of the rich. To wake up in the morning was to see a beautiful world. This is the lesson we may learn from Old Japan. It is a much better lesson than any that New Japan has learned from us.

I hope that I have made my meaning clear. The secret of a reasonable happiness for everybody lies in being governed by our work whatever it is and the ideals that we find in it. We must have something definite to do, every one of us, and we must do it as well as we can, following good precedents and having as our motive the Love of Excellence and Perfection and a longing for Order and Beauty everywhere. If we do not do that, Life, the Biggest Show on Earth, will not be worth the price of admission.

The only hope for Art, under existing conditions, lies in the establishment of standards of excellence in the several trades and professions and in the possibilities of art teaching in the public schools. If we can induce the several trades and professions to organize, not for the advancement of business interests but for the advancement of their several arts; if we can persuade them to establish standards of excellence and

perfection with promotion and distinction for those who rise to these standards or surpass them, something may be accomplished yet. If, at the same time, we teach the children in the Public Schools what to love and what to hate, what to do and how to do it, and give to those who are still young and in the beginning of life the ideal of good thinking, of good workmanship in work, of good design in things designed and of a rational control of matter everywhere, we shall be doing all that can be done for the restoration of the arts, which should be regarded as the real interest of life and the chief source of satisfaction and happiness. I can think of nothing else that we can do to stem the rising tide of disorder and discontent, of disappointment and unhappiness.

It is the love of the Beautiful that brings to order the world of the Gods.[1]

The vision is at last revealed of a single science which will be the Science of Beauty everywhere. To this we will proceed.[2]

Will they disbelieve us when we tell them that the State can only be happy which is planned by artists who make use of the heavenly pattern? [3]

We must now turn our thoughts from this criticism of Life to what may seem but a petty interest and concern; to consider what may be done by the Art of Painting. It is a very pleasant occupation, when we follow it with the love of excellence and perfection, with a single-minded devotion and with no thought of business: but why paint? The reason for painting lies in a love of the world of vision and of the visual imagination, and the reason for painting well lies in the love of Order and in the Sense of Beauty. Surely the Art which has these interests and motives is no mean Art.

When John Sebastian Bach was asked why he composed Music he said it was for the love of God and a pleasant oc-

[1] Plato: *Symposium.* Jowett's Translation, II, p. 52.
[2] Plato: *Symposium.* Jowett, II, p. 61.
[3] Plato: *Republic,* VI. Jowett, III, p. 386.

cupation.[1] There you have the whole story and the Secret of Art. Michael Angelo had the same idea when he said: "Good painting is noble and devout in itself, for with the wise nothing elevates more the soul and turns it towards devotion than the difficulty of perfection, which is a tendency to approach God and to be united to Him. Good painting is a copy of His perfections, a shadow of His brush; a music, a melody."[2]

[1] C. F. Abdy Williams: *Bach*, London, 1900, p. 20.
[2] La Farge: *Considerations on Painting*, p. 120 *et seq.*

ON DRAWING AND PAINTING

MATERIALS AND FIRST EXERCISES

PIGMENTS — PALETTES — BRUSHES — CANVASES

Our study of painting should begin with a study of pigments and other materials, to discover the best materials and the best methods of using them.

The first thing is to procure from makers of reputation and trustworthy dealers the following pigments, as prepared for oil painting: —

Lead or Zinc White.

Aureolin: a double nitrate of cobalt and potassium.

Cadmium Yellow: a salt of cadmium with sulphuretted hydrogen.

Yellow Ochre: a natural earth colored with oxide of iron.

Mars Yellow: oxide of iron and oxide of aluminium.

Cadmium Orange: a salt of cadmium with sulphuretted hydrogen.

Brown Ochre: earth colored with oxide of iron.

Vermilion: sulphide of mercury.

Venetian Red: earth colored with oxide of iron.

Indian Red: earth colored with oxide of iron.

Mars Violet: oxide of iron and oxide of aluminium.

Rose Madder: alumina and the root of madder.

Vert Emeraude: oxide of chromium.

Cobalt: sub-phosphate of cobalt.

Ultramarine (artificial): alumina, carbonate of soda and sulphur.

Burnt Sienna: earth colored with oxide of iron.

Van Dyck Brown: sulphate of iron.

Cassel Earth: lignite (decomposed wood).

Blue Black: burnt vine shoots.

The above-named pigments being properly made and of the right materials may, I believe, be used singly or in mixtures with perfect security. It may not be necessary to have so many pigments when it comes to the exercises and practice, but the student should have a knowledge of all the pigments given in the above list, so that he may think of them when there is occasion to use them. There are other pigments, of course, good pigments and equally serviceable, but they would not appreciably increase the tone possibilities of those I have given. With those we can produce all colors in all values between the extremes of white and black and we can produce the colors in degrees of intensity sufficient for all ordinary purposes, whether of Design or of Representation.[1]

It is a pity for the painter to be obliged to test and prove all the materials he has to use. It should be a separate profession. There should be experts to tell us whether the materials which the dealers offer are fit to use or not. It is supremely important that only the best materials should be used. The cost of the best materials may be made up, in part if not wholly, by economy in their use. As it is the duty of the artist to prevent, so far as he can, the production of inferior materials, he should resolutely abstain from buying them.

For a palette procure a good-sized sheet of transparent white glass. Setting the glass upon a table with a piece of white cloth or white paper under it, you will have the best possible ground and surface for your tones; a much better surface than that of a wooden palette, and it is a surface which you can keep clean, very easily. The advantage of having your tones on an even white surface will be at once appreciated. Accidental contrasts will be avoided and differences of value and of color in the tones more easily estimated.

In addition to the palette and the pigments a palette knife will be required and some brushes. The best palette knife will be a small one unless you are mixing up a great deal of paint.

[1] Jacques Blockx Fils : *Compendium à l'usage des Artistes Peintres.* English Translation. London, 1894. This is the best book we have on pigments.

The brushes should not be too large or too small but suited to the purpose in every case; small brushes for small work, large brushes for large work. Some of them should be of sable, some of bristles; some flat and some round. The brushes should be washed out constantly, as fast as they get dirty, in a can of rectified turpentine kept alongside of the palette and conveniently within reach. The cans which have a grating upon which to rub the brushes when you are cleaning them are the best. The turpentine should be of superior quality as some of it will remain in the brushes and find its way into your painting. It is a good plan before putting the brushes away for the day to wash them with a good soap. This is easily done when the paint has already been washed off in the turpentine. Brushes kept clean and in good condition will last for a long time. As a rule, there is linseed oil enough in the pigments to make a good medium, with the small amount of turpentine which remains in the brushes when they are constantly washed out in it. If it is desirable to keep the tones on the palette from day to day, the palette, which is of glass, may be immersed in clear water. That means that a metal or china dish large enough to hold the glass palette will be required. The agate-ware baking-pans are very good for this purpose. When the palette is removed from the water it must be set up on end and the water drained off, when it will be necessary to moisten the tones with a little linseed oil and to soften them with the palette knife. Only the very best of linseed oil should be used.

The surface upon which we draw and paint should be carefully prepared of the best materials. The experience of the past should be referred to and only methods well tested should be followed. If the painter does not prepare his canvases or panels himself, he must depend upon the manufacturers and dealers and he must be sure that they are trustworthy. What is cheap is constantly offered instead of what is good. The cheap canvases now produced and very generally used are not likely to endure for more than fifty years. If the paintings put

upon them are worth the trouble and expense they will have to be transferred to other and new canvases.

For the preliminary exercises which I am about to describe white cards may be properly used instead of canvases. The permanence of these cards is of very little consequence, as the exercises performed upon them are nothing but exercises and have no value when they are done. The pigment materials, however, which are used in the exercises must be of the best quality. The exercises are planned to teach the student how to use the pigments which he is going to use in later practice. He must use in all his exercises the pigments he wants to know and understand.

To become familiar with your pigments and to learn what can be done with them, put out on your glass palette a sample of each one. Then mix the pigments, one with another, observing what tones are produced by these mixtures. Put the mixtures upon smooth white cards and keep them for a while, as samples for reference. Be sure to write down how each tone was produced; with what pigments. It will not be worth while, as a rule, to make mixtures of more than two or three pigments, for in such mixtures the component elements become indistinguishable. Any two or three pigments may be mixed with white, by which means the tone of the mixture is raised in value and more or less modified in color. The effect of the admixture of white should be particularly observed; the effect upon the value of the tone and the effect upon the color. It is worth while in many cases, when it is possible, to avoid the use of white for the sake of preserving the colors in greater purity or in higher degrees of intensity.

TONE-ANALYSIS AND DEFINITION

The tones which you have produced by experiments in the mixing of pigments, the tones which you have put upon white cards, should be classified and defined. In every tone there are three elements to be considered: first, the quantity of light in the tone, — that is to say, its value; second, the

quality of the light, — that is to say, its color; and, third, the degree of color-intensity or color-neutralization. To define any tone in terms of language, we must name, first, its value; second, its color; third, the degree of color-intensity or neutralization. Given the definition we should be able to produce the tone.

VALUES

In order to name the value of any tone we must know what values are possible. We must have a Scale of Values to refer to. The extremes, of course, are Black and White. Between these extremes we have an indefinite number of degrees. No indefinite number, however, will serve us in our tone-analysis. The quantities or values of light between the extremes of black and white must be numbered and named. It is sufficient, to begin with, if we distinguish seven degrees or values of light between the extremes and give them names, as follows: —

White	(Wt)
High Light	(HLt)
Light	(Lt)
Low Light	(LLt)
Middle	(M)
High Dark	(HD)
Dark	(D)
Low Dark	(LD)
Black	(Blk)

This is the Scale of Values.

Exercise: Produce the Scale of Values in tones of Black and White. Put it upon a white card and keep it for reference.

The abbreviations, Blk, LD, D, HD, M, LLt, Lt, HLt, and Wt, will be found useful as a means of saving time when the names of different values must be put in writing.

Between the values of the scale, as above described, are possible intermediates which may be named in the terms

of their adjacents. The intermediate between Dark and High Dark, for example, may be named Dark High Dark (DHD).

COLORS

Given any tone, to find its color, we must know what colors are possible and we must have a Scale of Colors to refer to, just as we have a Scale of Values, and the scale must be definite; that is to say, it must be a scale of certain colors in a certain order. Among all possible colors we can easily distinguish twelve, as follows: Red (R), Red Orange (RO), Orange (O), Orange Yellow (OY), Yellow (Y), Yellow Green (YG), Green (G), Green Blue (GB), Blue (B), Blue Violet (BV), Violet (V), and Violet Red (VR).

It is important that the words which we use for the different colors should be well understood, so that in using them we use them with the same meanings. By Red I mean the only positive color which shows no element of Yellow or of Blue. It is the color which we often describe by the word Crimson. It is produced by the mixture of Rose Madder and Vermilion. By Yellow I mean the only positive color which shows no element either of Red or Blue. It is the color of the primrose, which may be produced by the pigment Aureolin with a very little Vert Emeraude. By Blue I mean the only positive color which shows no element either of Yellow or of Red. Blue is seen in a clear sky after rain and in the pigment Cobalt. By Orange I mean a positive color showing equal elements of Red and Yellow. By Green I mean a positive color showing equal elements of Yellow and of Blue. By Violet I mean a positive color showing equal elements of Blue and Red. The character of the intermediate colors is clearly indicated by their several names. In each one we see the adjacents in equal measures.

Exercise: Following the definitions just given produce the Scale of Twelve Colors, each color as pure, that is to say, as strong and intense as possible. Use the pigments given in the

list and arrange the colors, on a white card, in a horizontal line, beginning with Red on the left and ending with Violet Red on the right.

Observe, that when we produce the Scale of Colors in this way, in a horizontal sequence, we have in the result an unmistakable suggestion of the Spectrum. We have in the Spectrum an indication of the natural order and value relation of the different colors. The colors occur, when in their highest intensities, in different values or quantities of light. Red occurs in High Dark, Orange in Low Light, Yellow in High Light, Green in Low Light, Blue in High Dark, Violet in Low Dark; approximately. The intermediate colors occur in their highest intensities in intermediate values; approximately.

If we wish to discriminate further in colors, we may proceed to the intermediates of the scale of twelve, defining each intermediate in the terms of its adjacents, thus: R, RRO, RO, ROO, O, OOY, OY, OYY, Y, YYG, YG, YGG, G, GGB, GB, GBB, B, BBV, BV, BVV, V, VVR, VR, VRR.

It may be convenient to use the word Crimson (C) for Red (R), the word Scarlet (S) for Red Red Orange (RRO) and Purple (P) for Red Red Violet (RRV).

DIAGRAM OF VALUES AND COLORS

Wt													Wt
HLt	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	HLt
Lt	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	Lt
LLt	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	LLt
M	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	M
HD	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	HD
D	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	D
LD	R	RO	O	OY	Y	YG	G	GB	B	BV	V	VR	LD
Blk													Blk

COLOR-INTENSITY AND NEUTRALIZATION

To understand how a color may vary in intensity and be more or less neutralized, take any color in any value and see what variations of tone you can produce without changing the color or the value. The only changes you can make will be in the direction of neutrality. Having defined any tone according to its color and according to its value, to define it as to its intensity you must be able to say whether the color is as intense as possible in the value, or half as intense, or perfectly neutral, showing no color whatever. In some values it will be possible to distinguish as many as three differences between the extremes of intensity and neutrality. In other values, where the highest intensity possible in the value is a very low degree of intensity, discrimination becomes more difficult and it may be impossible to distinguish even one intermediate between the extremes. Every color proceeding from the point of its highest possible intensity disappears in the neutrality of Black, in the neutrality of White and in the other neutralities of the Scale of Values.

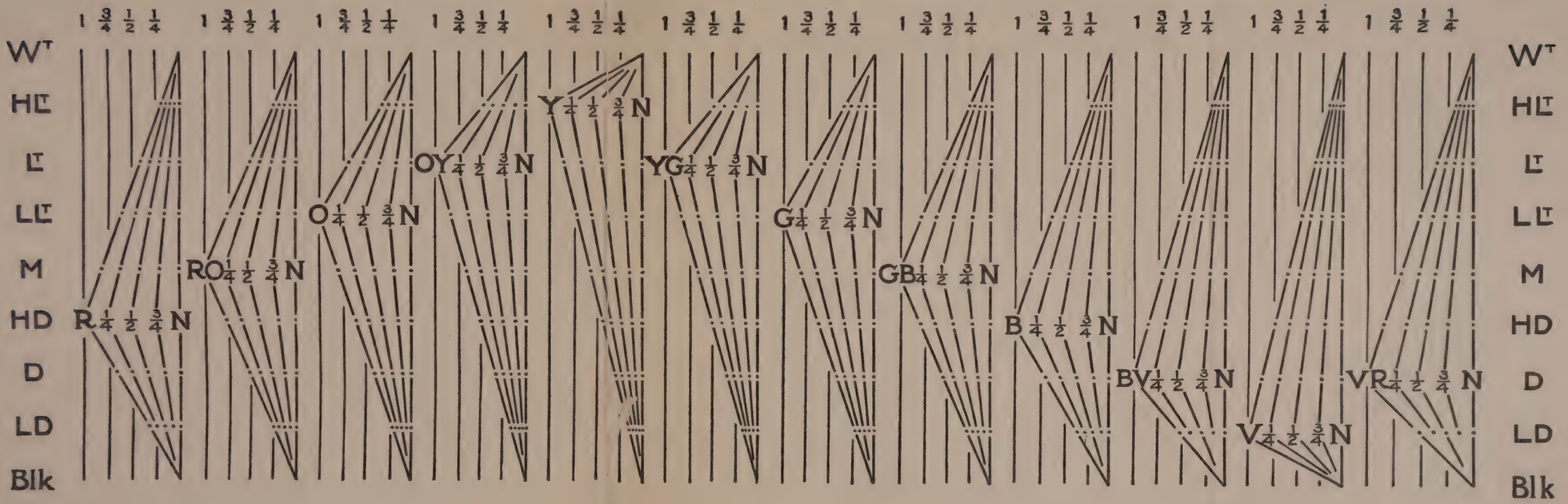
For convenience of classification Neutrality, whether black, gray or white, should be regarded as a color, though it is colorless. It represents white light, in which all the colors exist but are not seen.

All the possibilities of value, color, and color-intensity are indicated in the Diagram of the Triangles. Each triangle of this diagram represents one of the twelve colors in all possible variations of value and intensity. We have, therefore, in this Diagram a classification for all tones possible to pigment materials.

It should be observed that the color-intensities obtainable with the pigment materials we have selected and propose to use vary in degree. We are able to reach higher degrees of intensity in some colors than in others. This fact is ignored in the Diagram of the Triangles. The highest intensities of the different colors are assumed to be equal. The statement of the Diagram, is, in this respect, theoretical.

DIAGRAM OF THE TRIANGLES

A GENERAL CLASSIFICATION OF TONES AS TO VALUE, COLOR, COLOR-INTENSITY AND COLOR-NEUTRALIZATION



Exercise: Produce the tones indicated on the Diagram of the Triangles. This is the most important of all exercises in the study of tones and tone-relations. It is like a practice of the scales on a musical instrument. No musician can get on without that practice and a great deal of it. No painter can get on without constant practice in producing color and value scales. It means getting an ability to think definitely in tones and tone-relations and to express the thought correctly by painting.

Having produced all the tones of the Diagram of the Triangles, the student will be annoyed to find that the tones, though permanent, being produced with permanent pigments, have no permanence of effect. They change with every change in the character of the light in which they are exhibited. Hot tones are intensified and somewhat raised in value in a hot light; cold tones are intensified and somewhat raised in value in a cold light. The light is always changing both in quantity and in color-quality and there is no permanence of effect in any tone-relations, however carefully established. It follows, if the tone-relations established by the painter are to be maintained for the beholder, that designs and pictures should be seen in the light in which they are produced or in a corresponding light. There is many a picture which has lost its charm because the light which it requires is not provided for it. What a picture looks like depends upon the light in which it is seen. It follows that illustrations in color, if given in this book, would be of little value. No such illustrations, therefore, are given. Fortunately our terminology is one which will carry us a long way in our efforts to discriminate in tone-relations. We must make illustrations for ourselves, not for the sake of the illustrations, but for the sake of the power of visual discrimination which comes with the effort to achieve a consistency of tone-relations in the light in which we happen to be working.

SET-PALETTES

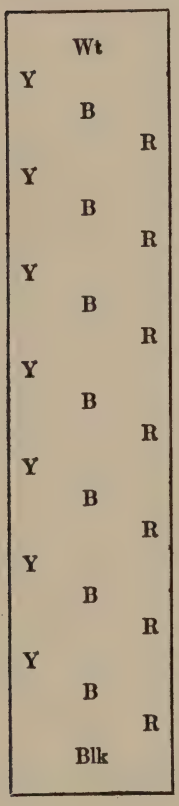
GIVEN a palette with a sufficient variety of pigments set out upon it and the possibility of producing all the tones represented in the Diagram of the Triangles, we are presumably ready to take up the practice of painting and in connection with it the problems of Design and of Representation. What more can we require than a palette which will give us all possible tones; every color in every value and every color in varying degrees of intensity or of neutralization? Nothing more than that can be required, certainly. The question is whether something less than that will not serve the purpose, as well if not better. So wide a range of tones may be more embarrassing than helpful. With a palette of infinite possibilities, the selection of particular tones for particular purposes becomes very difficult and definite thinking in tone-relations impossible. It is only when we have very much reduced the possibilities of the palette that we can think definitely in tone-relations and are able to decide without hesitation what tone to use in any particular case. A palette of infinite possibilities is unnecessary and undesirable.

I propose, now, to describe a number of limited set-palettes which will serve the painter well, I am sure, and help him over many difficulties. I have indicated on pages 45–46 a series of such palettes; palettes of twenty-one tones with White and Black. We have in these palettes the three elementary colors, Red, Yellow and Blue, repeated in seven planes or registers of light, a register for each value of the Scale of Values. In each palette the three colors are repeated in a certain order and as the order of three colors admits of six differences we get six palettes from which we may choose the one best suited to our purpose.

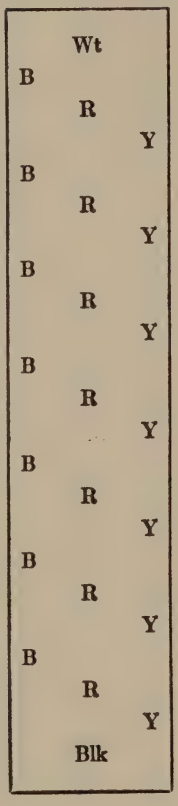
In the registers of Palette 1 Blue is above Yellow and Yellow above Red. In Palette 2 Yellow is above Red and Red is

PALETTE 1
Wt
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
Blk
PALETTE 2
Wt
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Blk
PALETTE 3
Wt
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
R
B
Y
Blk
PALETTE 4
Wt
R
Y
B
R
Y
B
R
Y
B
R
Y
B
R
Y
B
R
Y
B
R
Y
B
R
Y
B
Blk

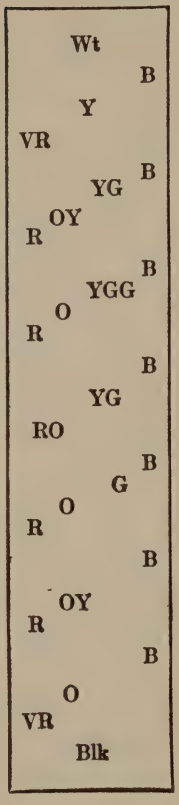
PALETTE 5



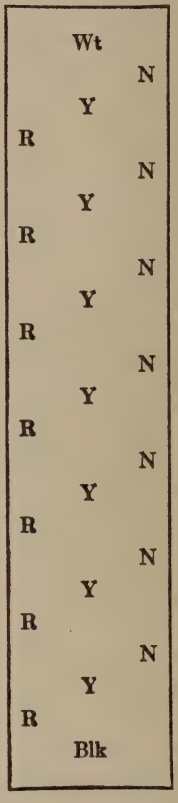
PALETTE 6



PALETTE 7



PALETTE 8



above Blue. In Palette 3 Red is above Blue and Blue above Yellow. In Palette 4 Red is above Yellow and Yellow above Blue. In Palette 5 Yellow is above Blue and Blue above Red. In Palette 6 Blue is above Red and Red is above Yellow.

In order to maintain a consistency of tone-relations it is necessary to have the colors in a certain order in each register or plane of light and to have them in the same order in all the registers. If Blue occurs above Yellow and Yellow above Red in one register it should be so in all of them. If Red occurs above Yellow and Yellow above Blue in one register it should be so in all. If the order of values and colors varies in different planes of light we shall find that our tones will not hold their places where we put them. Some will come forward unexpectedly, others will go back, and we shall be disappointed in the result and effect of our work. Painting without a set-palette, we shall make this mistake, inevitably, unless we are very sensitive and observing and even when we see that our tones do not hold in their places we may not know why, and we may have considerable difficulty in getting the tones to go back or come forward as they should. The surest way to obviate this difficulty is to use a set-palette and to be sure that the colors are in a certain order of values and that they are repeated in that order from register to register, the registers representing the different planes of light.

There is another important consideration, which is this: that the top color in each register not only represents that color, as it may be required for purposes of representation, but represents, also, the color of the light and indicates whether it is cold or hot. The color which is the top color in the register being mixed in some measure with all the tones of the register gives them a consistent tonality, the tonality of one light, which is Blue or Yellow or Red, as the case may be. In using the set-palette it is very easy to achieve a consistent tonality. It is very difficult to achieve it without one. It is only those who are particularly sensitive and observing who succeed, and if they succeed it is generally by a long process of correction

toward a righteousness which is attained approximately, not absolutely.

It is only when we wish to represent changes in the color of the light that we pass from one register system to another. It is possible to do this without changing the palette, by passing from a register system with Blue at the top to one with either Yellow or Red at the top, on the same palette. Suppose, for example, I am painting with Palette 1, in which palette I have Blue above Yellow and Yellow above Red in each register. Mixing the higher Blues into the lower Yellows and Reds, using perhaps a very small measure of the Blue in these mixtures, I produce the tonality of a blue light. In the subject I am painting there is, perhaps, a passage of reflection from a yellow drapery which is not in the tonality of a blue light, but in the tonality of a yellow light. What I must do is to use the register system of Palette 2, but to do this I do not necessarily change my palette; I simply drop from Blue, as the top color of the register, to Yellow, and paint in registers having Yellow above Red and Red above Blue, and I do this without changing my palette. For red reflections I should pass, in the same way, without changing my palette, to registers having Red above Blue and Blue above Yellow, which is the system of Palette 3. In this procedure I am simply following Nature as closely as I can.

Put tones of Red, Yellow and Blue on a white card as nearly as possible in the same value and as intense as possible. Then hold the card in a cold light, in the light of a blue sky, for example, and you will see that the tone of Blue is very much enhanced and raised in value. The Yellow is raised in value, also, but not so much and it is turned a little towards Green. The Red is slightly raised in value and turned a little towards Violet. Hold the card in a Yellow light and you will see that the Yellow is enhanced and considerably raised in value. The Red and Blue are raised, also, but not so much. The Red becomes slightly Orange and the Blue slightly Green. Hold the card in a Red light and it is the Red which is enhanced and

raised in value above the other colors. Blue is raised a little towards Violet and Yellow towards Green. It is in view of these facts that the register system has been devised.

It is always worth while to consider the light in which you are painting and to use a palette which will be in sympathy with it. In painting indoors, in a north-lighted studio, where in clear weather I get my light from a blue sky, I instinctively prefer to use a palette with Blue at the top of each register. Under the circumstances I am almost sure to use Palette 1 or some modification of it. There is another reason, also, for preferring this particular palette. If I am painting figures or portraits, I want a Blue at the top of each register as a means of neutralizing the yellows and reds which in flesh tones must be neutralized, often much neutralized, if the flesh is pale, cool and neutral as it often is. I use the same palette out of doors, also, if my canvas is in the light of a blue sky. The canvas being in sunlight I prefer a palette with Yellow at the top of each register to represent the color of the sunlight if it is yellow. In that case I take Palette 2 or use Palette 1 with the register system of 2. Palette 5 might work better, however, so far as the greens are concerned, because the greens produced by the mixture of a high Yellow with a lower Blue are so much finer than the greens produced by the mixture of a lower Yellow with a higher Blue. If I use Palette 5, I have no means of neutralizing the greens, as they must be neutralized in shadows and in distances. To neutralize them with a lower Red would spoil them. I ought, perhaps, to prefer Palette 4, which gives me Red above Yellow and Yellow above Blue. I can then neutralize my greens with a higher Red which will neutralize them better than a lower Red. If I am painting out of doors with Yellow or Red as the top color in the registers of my palette, I must avoid painting in the light of a blue sky which will be bothering me all the time. I must put up a white umbrella. Under a warm light thus produced I shall probably do better work. If, however, when the work is done I take it indoors and look at it in a cold north light I may be very much

disappointed in the effect. In the same way if I paint my picture in a cold light, with Blue as the top note of the register system, I am disappointed when I look at the picture in a warm light, under gaslight, for example. Under such changes in the color of the light the convexities of my modelling may, to my surprise and disgust, become concavities; the color-sequence in which I have achieved my modelling being upset by the change of the light. Pictures should, so far as possible, be painted in the light in which they are afterwards to be seen and with a palette appropriate to that light. The solution of the difficulty may be found in the rule to paint always in a white light, neither hot nor cold, and to see that your pictures when painted are shown in a white light.

The six palettes I have described are subject to various modifications and changes of form for particular purposes. Intermediates may be introduced, and it is possible to substitute for any color its adjacents in the color-scale. This does not apply, of course, to the top color of the register, which represents the color of the light and determines the tonality of the design or picture painted with it. Palette 7, on page 46, shows how Palette 1 may be modified for the sake of a greater variety of colors or for particular purposes of coloring.

It is easy to suppress any color on the palette which is too intense by neutralizing it, substituting a more neutral quality of the color for a more intense quality, even substituting a perfect neutral in the place of a color. For example, gray blues or even grays may be substituted for the intense blues of Palette 1, if these blues are not required or not required in any high degree of intensity. Substituting grays for blues we have a palette of White, Black, Yellow and Red. In Palette 8, on page 46, we have neutral grays substituted for blues which are presumably not required. The neutrals thus substituted for the blues represent the color of the light just as blues did. The light becomes perfectly colorless, neither hot nor cold. Introducing a very little yellow into the grays the light is still neutral but warmer in its tone.

If blues as well as grays are required, neutrals may be put above the yellows in Palette 2. That gives us Palette 9, shown on page 53. In this palette the greens will come in approximately the same value as the reds and will be produced by mixing a higher yellow with a lower blue. The best greens are produced in that way. We have in Palette 9 what amounts to a spectrum relationship of colors in every plane of light with a neutral which represents White and white light above the colors. It would be difficult to devise a better form for the set-palette or a form more easy to understand. You have a relative white at the top of each register, below it Yellow passing through Orange down to Red, also Yellow passing through Green down to Blue; with the possibility of neutralizing all the colors either by the top neutral or by the cross-mixing of complementaries.

It is interesting sometimes to paint with a register of Gray above Yellow without Red, glazing afterwards with Red, where Red is required; also to paint with Gray above Red, glazing afterwards with Yellow, where Yellow is required. This process was used by the masters of the Renaissance with admirable effect. Very interesting textures and beautiful qualities of color are obtainable by these means. In glazing, only transparent pigments should be used, such pigments as Rose Madder, Transparent Mars Yellow or Vert Emeraude. The mixture of Rose Madder and Vert Emeraude produces a blue-gray tone which may be used to neutralize reds and yellows. We have no blue pigments, so far as I know, which are at once transparent and permanent. The modern painter instinctively avoids all indirect methods of painting, and the process of glazing has been abandoned. This is unfortunate, as some of the most beautiful qualities of texture and of color are in no other way obtainable.

The best palette for monochrome painting will be a palette of grays and neutral yellows, the grays being above the yellows in each register. Very beautiful drawings in *grisaille* may be made with this palette. It is a good palette, also, for under-

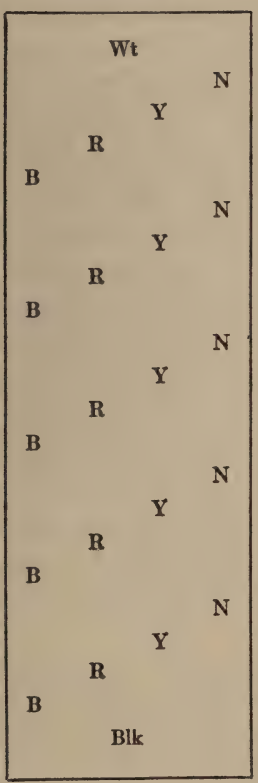
paintings in which the composition and the drawing are more or less completely achieved in monochrome.

The number of registers required in the set-palette is determined by the particular purpose of the painter. If he is painting in Pure Design he may not require more than two or three registers, but if he is going into the realistic representation of form in effects of light and shade he may require five or even seven registers. More than seven registers must not be thought of, as they are too difficult to produce.

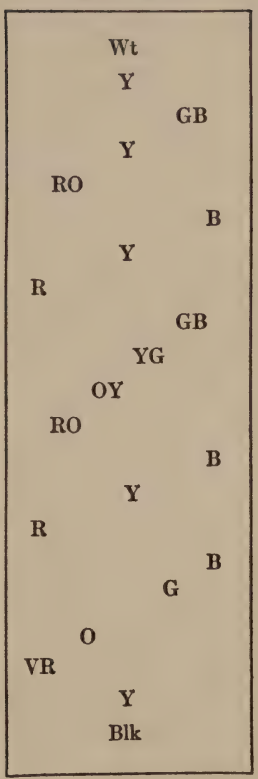
There is another palette, Palette 10, which should be mentioned which is not very far from being the palette which was used by Rubens and some other masters of the Renaissance. The form of this palette is shown on page 53. This palette, more than any other that I have proposed, reproduces the relation of colors and values which we see in the Spectrum. It was not, however, worked out with any particular reference to the Spectrum. It is based upon a color and value analysis of certain paintings by Rubens. In using this palette I am constantly reminded of Rubens in the way the tones come. I am reminded also of Correggio and of Turner. The descents from Yellow follow, as I have said, the value and color relations of the Spectrum, with an omission, however, of all violet tones. Violet rarely occurs in Renaissance painting. The lower tones of the palette are found in Burnt Sienna more or less mixed with a cool Green like Vert Emeraude. Below these orange and green tones comes a very dark brown, Van Dyck Brown or Cassel Earth, perhaps, which disappears in Black. The registers in Palette 10 are not repetitions of one another, but variations of the movement from Blue down to Red; variations which are so devised as to get the colors, as many as possible, to occur in the value of their highest intensities and in those intensities. Palette 10 is a palette for the lover of color. It is equally good for the practice of Pure Design and for the purposes of Representation in forms of Design.

On pages 209–214, at the end of the book, I have indicated a series of forty-eight palettes in which the twelve colors of

PALETTE 9



PALETTE 10



the Scale of Colors are set in sequences of twelve values between the extremes of Black and White; the relation of the colors to the values being different in each palette. The color sequences of these forty-eight palettes have been obtained by regarding the twelve colors of the Scale of Colors as an interminable sequence or circuit and then taking the colors from this sequence or circuit at certain intervals. In Palette 11a and in the twelve palettes to which the number 11 has been given — 11a, 11b, 11c, etc. — the colors are taken at two intervals of the fifth followed by one interval of the sixth. The twelve palettes differ merely in the relation of the twelve colors to the twelve values. In Palette 12a and in the twelve palettes of the same number, lettered a, b, c, d, etc., the colors are taken at the same intervals, but in the opposite direction or reading of the Scale of Colors. In Palette 13a and in the twelve palettes to which the number 13 has been given, the colors are taken at two intervals of the fifth followed by one of the fourth. In Palette 14a and in the twelve palettes to which the number 14 has been given, the colors are taken at two intervals of the fifth followed by one of the fourth. The intervals are the same as in the palettes numbered 13, but the colors are taken in the opposite direction or reading of the Scale of Colors.

The forty-eight palettes of twelve colors between the extremes of Black and White are not recommended for a realistic representation of objects, people and things as we see them in Nature and Life. For that purpose we must have five or more planes of light with a repetition from plane to plane of the required colors in a certain order of values. The forty-eight palettes of twelve colors in twelve values with Black and White represent the twelve colors in different values as they might occur and be observed in a single plane of light. These palettes are, therefore, proposed as different color-schemes and are intended, particularly, to serve the purposes of the painter in Pure Design. They are serviceable, also, in Representation, when the representation is in the mode

of Outlines and Flat Tones, when there is no modelling of forms and no attempt to produce realistic effects of light and color. They are serviceable, also, in Representation, when the modelling of the forms is in very low relief, as it is in early Florentine painting. We have in each palette light colors and dark colors, but no repetition of any color or colors in the different planes or registers. We have in each palette four planes of light with three colors in each plane. In using these palettes the distinction of planes or registers should be maintained. There should be no mixture of the tones of different registers.

The value of these palettes of twelve colors in twelve values with Black and White lies in the fact that they give the designer a keyboard of fourteen tones. Upon this keyboard he ought to be able to think out his contrasts and produce his repetitions, sequences, and balances without difficulty. It is a great advantage for the designer when he has a few definite tones which he can see before him upon his palette and a few simple rules for mixing them which he understands and obeys. The value of these palettes lies in their several limitations and the possibility of definite thinking which they afford. They are modes in which the imagination becomes active and creative, just as it becomes active and creative in the modes of musical composition, when we think in the sounds of the musical scale and of its several keys and according to the rules of Counterpoint or of Harmony.

The great value of these set-palettes which I have described will be found in the habit of exact and definite thinking in tone-relations which their use implies and in the possibility which they offer of achieving a consistency in tone-relations and effects impossible to achieve without them. The use of set-palettes was universal with the great masters of the Renaissance and it has persisted almost to the present time; but nobody uses them now. The painter who is accustomed to the lawless methods of modern impressionism is sure to object to the use of these set-palettes as an obstacle in the way of a direct and accurate expression of personal feeling or

emotion. I remember the young painter who said to me that he went home and tried to use a set-palette according to my directions and he soon found that he could not do anything with it: it checked his impulses and prevented anything like spontaneity. He had spent a whole afternoon(!) in discovering that the set-palette was an obstacle, not an aid to expression. He then gave it up. When the painter has given the set-palette a fair trial, when he has used it for some time, some months or some years, when he has used it properly, following the rules conscientiously, when he is able to use the palette and follow the rules without thinking about them, he will find that the palette offers no obstacle at all to the expression of his thought but is an aid and even a stimulus. He will be able to think definitely in tone-relations and to express himself accurately as never before, thanks to the limitation of his palette. It is only in the beginning, when the painter is not at all familiar with the set-palette, does not understand it and does not know how to use it, and forgets its rules or is trying to remember them, that expression seems difficult if not impossible. We have all had the same experience in the study of a language. At first it is an obstacle to expression, but when we have mastered the language we find that it does not hinder but helps us. The painter has in the set-palette what the musician has in his instrument, in the Musical Scale and its different keys or tone-systems. To produce the tones of the set-palette in the first place and then to get consistent and beautiful results from it is an art in itself, no less difficult than learning to tune a violin and to play upon it in different keys. Nobody learns to play on the violin without the help of a master and without years of technical exercises and practice. So it is in painting. The use of the set-palette is equally difficult. It is an art in itself; an art acquired by scientific instruction and by years of hard work.

DRAWING AND PAINTING

WHAT IT MEANS TO DRAW AND TO PAINT

With a palette prepared for use, with the tones set upon it in their proper order, with brushes to paint with and a surface to paint upon, we are ready to proceed to the practice of Drawing and Painting.

Painting means taking tones from the palette and giving them positions, measures and shapes upon the surface we have chosen to paint upon. Painting means, therefore, a consideration of tones, what tones to draw with; a consideration of positions, where to put the tones; a consideration of measures, over what areas to spread the tones, and a consideration of shapes, what shapes to give to the tones. All these questions have to be considered and decided for every single stroke of the brush. It is easy to see how many acts of judgment are involved in the production of the very simplest of designs and pictures. Good results mean good judgment in all these matters and bad results mean failures of judgment. Drawing is almost the same thing as painting, but not quite. Strictly speaking, it means the definition by lines and spots of positions, measures and shapes, ignoring all differences of tone except the inevitable difference between the tone of the drawing and the tone of the surface upon which the drawing is made. In drawing we are not supposed to use a palette. Drawing is generally done with a pencil or a stick of charcoal. The definition of positions, measures and shapes is perfectly possible with these simple materials. It is possible, also, with these same materials to distinguish different planes of light by different values of black and white; the gray or black of the pencil or charcoal being combined with the white of the paper. This modelling in black and white with pencil or char-

coal is also called drawing, though it is, properly speaking, a kind of painting. Drawing may be defined, therefore, as painting in monochrome with particular reference to positions, measures and shapes; and painting may be defined as drawing with a particular interest in tones and tone-relations.

With a palette prepared for use, with the tones set upon it in proper order, let us take a brush and let us draw upon a white card or piece of white paper a variety of lines and spots of paint. Let us then consider what we have done; what ideas we have expressed by these acts of drawing and painting. In every line, in every spot we have put upon the paper, we have expressed at least five ideas: First, an idea of tone, the tone used in drawing the line or the spot. Second, an idea of tone-contrast, seen in the relation of the tone used in drawing to the tone upon which the drawing has been done. In this particular case the tone used in drawing is contrasted with the tone of white paper. Third, an idea of position, the position given to the line or spot. Fourth, an idea of size or measure, the measure of the line or the size of the spot. Fifth, an idea of shape, the shape of the line or spot. We have expressed all these ideas, in every case, in every line, in every spot put upon the paper. If in drawing any line or spot we have thought of those we have already drawn or of those we propose to draw, we have expressed, also, ideas of relation and connection in the lines and spots.

The interest in lines and spots, as such, apart from what they may suggest, apart from the ideas which they express of Design or of Representation, is an interest in Physics or an interest in Geometry. The measurement and definition of tones, as tones, belong to Physics. The measurement and definition of positions, sizes and shapes belong to Geometry: but these are not, as a rule, the interests of the draughtsman and painter. His interest lies in the ideas of Order or Design which he is able to express by lines and spots of paint or it lies in Representations more or less specific and particular, which he is able to achieve in these terms. In taking up the

practice of Drawing and Painting he is supposed to have one or the other of these interests or both of them.

We will now proceed to consider these interests of the draughtsman and painter more particularly; taking up first the interest in Design, then the interest in Representation and lastly the possible connection of these two interests in one.

ON DESIGN

By Design in Drawing and Painting I mean Order. By Order I mean, particularly, three things: Repetition, Sequence and Balance. These are the principal modes in which Order is revealed in Nature and achieved in works of Art.

THE ORDER OF REPETITION

The Order of Repetition is the simplest of the forms of Order; the one which occurs most frequently and is the best understood. The Order of Repetition is very perfectly illustrated on the plain surface of a white card or on a sheet of white paper, where as the eye moves from one point to another it receives the same impression again and again. A certain tone of white is repeated and recurs all over the surface, in every direction. To emphasize the idea that the repetition is in two or more instances, the white card or sheet of paper may be cut into two or more pieces of corresponding measures and shapes. The fact of repetition then becomes unquestionable. If the surface of the card has a texture the repetition is of a relation of two or more tones in contrast and vibration. The tone-value of the surface is broken into lights and darks by its texture. The tone-color is similarly broken into differences of color. We have the repetition and recurrence of these differences and vibrations all over the surface as far as it extends. The repetition over a surface may be of a composition of two or more distinctly contrasting tones; the repetition being of the effect of light which these tones produce when seen together.

When I draw a line on my white paper the order observed in the repetition or continuation of white is broken. It is then a question whether the line or the spot I have drawn has any order in it. So far as the line is of one tone we see the repeti-

tion of that tone as far as it goes in any direction or in any series of directions. If the line is straight the repetition is in one direction and we have one direction as well as one tone repeated. If the line changes its direction in angles or in curves it will be a question whether these changes of direction are repeated. In the case of angles it is a question whether the angles are repeated or the intervals between the angles or both angles and intervals. If the width of the line changes it is a question whether this change is continued or not and whether the interval between the changes of width is repeated. Drawing a certain line repeatedly we have Order in this repetition, especially if the line repeated is repeated in the same attitude. When the line is repeated in different attitudes the fact of repetition is not so easily appreciated. Lines may be repeated in the same attitudes, with or without a repetition of the interval between them. It is the same with spots or areas. Any spot or area may be repeated in the same or in different attitudes. The order of this repetition is best appreciated when the attitude of the spot is repeated, as well as the tone, the measure and the shape of it. A certain measure may be repeated in different shapes. A certain shape may be repeated in different measures. A tone may be repeated or continued, or simply an element of the tone; the value of it or the color of it. The intensity of the color may or may not be repeated. Even a single element repeated brings a certain measure of order into the composition and the order is increased as the repetition is of a larger and larger number of elements. The order is perfect when the repetition is of all the elements; tone, measure, shape, attitude, interval. The order is perfect in the case of the white card which shows no changes or differences whatever. One part is just like another.

Harmony Produced by Repetitions

The result of these repetitions is Harmony. To be in Harmony two or more effects of light must have at least something in common. Some element, at least, must be repeated. The

greater the number of repetitions or recurrences the greater the Harmony. The Harmony is perfect when all the elements are repeated and there is an exact correspondence between the effects. There is another consideration. The more distinctly the repetitions are felt the greater will be the sense of Harmony. The repetitions and the Harmony which is produced by them must be as distinctly felt as the element of variety and contrast. Wide intervals and large vacant spaces between the repetitions should be avoided, for they will catch and hold the eye and prevent the appreciation of the repetitions. Any strong contrast of tones, whether it be a contrast of value or of color, will hold the eye and keep it from moving over the surface to appreciate the repetitions and the Harmony of them. Any tone of particularly intense color, especially if it appears among tones which are comparatively neutral, will hold the eye in the same way; so, also, all strong differences of measure and of shape and complications of drawing from which the eye cannot escape so as to appreciate the repetition and the Harmony. The feeling of Harmony is given by continuations, repetitions and recurrences, not by variety or by contrasts. Variety in tones, measures, and shapes may be interesting, very interesting, and for that reason desirable, but variety is not in itself harmonious or orderly. Variety means Disorder rather than Order, Discord rather than Harmony. Given a variety; the question is what can be done with it to bring Order into it. One thing to do is to take the variety, whatever it is, and repeat it at short intervals so that the fact of repetition may be at once appreciated. Another thing to do will be to suppress some of the differences and contrasts observed in the effect which is repeated.

Tone-Harmony

There are three ways of bringing Harmony into tone-relations, when Harmony is required. First: The value-contrasts may be diminished in the direction of one value which is to be predominant. That means Value-Harmony. Second:

The color-contrasts may be diminished in the direction of one color which is to be predominant. That means Color-Harmony. Third: The intensities of color may be suppressed and a common neutrality or grayness given to all the tones. That, also, means Color-Harmony, gray being regarded as a color.

If we keep the whole design or picture within the range of three or four values of the Scale of Values we shall get the feeling of Value-Harmony, unmistakably. If we keep the whole design within the range of one third of the color scale we shall feel Color-Harmony. If the different colors are half neutralized we feel the Harmony of an all-over grayness.

These rules which I am giving for Tone-Harmony are not necessarily followed. They must not be followed, any of them, as a matter of course. The draughtsman and painter is expected to use his judgment in all cases. The rules I am giving are not "recipes for the beautiful." They are modes of thought which we follow or not as we please. There are no recipes for the Beautiful.

Measure-Harmony

Measure-Harmony is produced by the repetition and recurrence of a certain measure or size. It occurs constantly in the repetitions of Pure Design and is more appropriate in Pure Design than in Representation. It occurs in Representation, but less obviously. If, in Representation, a drawing is made with lines and outlines, all of one tone and one width, that gives a Harmony to the drawing, but this Harmony is often undesirable. We do not greatly admire what Mr. Henry James has called "the attenuated outlines of Flaxman." We prefer an interesting and expressive variety in the line.

If our object is to achieve Measure-Harmony we should avoid all contrasts of the very large and the very small, whether in lines or in spots. Measure-Harmony means a repetition and recurrence of one measure or approximately one measure. When, in Representation, we have large spaces contrasting with small spaces we may, if we please, for the sake of Measure-

Harmony, introduce objects or figures into the larger spaces. In so doing we cut them up. Value- and color-contrasts may be diminished or even suppressed in order to bring several small areas into one large one, if one large one is preferred to several small ones. The repetition of a certain measure in the different parts of a picture, so that in looking at the picture you feel one of it, or two of it or three of it, is often agreeable, if it does not involve a sacrifice of other things, the Truth of Representation for example, when we are painting with the idea of Representation. Measure-Harmony, as I have said, is far more appropriate to Painting in Pure Design than to Painting in Representation.

Shape-Harmony

Shape-Harmony means the repetition and recurrence of a certain shape or of a certain composition of shapes. Shape-Harmony occurs constantly in Pure Design. It is best appreciated when the shapes repeated are repeated without change of scale or of attitude. The recurrence, however, of the same shape-character in different parts of a composition produces an effect of Harmony. The repetition of shapes giving Shape-Harmony, like the repetition of measures giving Measure-Harmony, is more appropriate to Painting in Pure Design than to Painting in Representation, where, as a rule, we are interested in differences of character expressed by differences of shape. It is possible, however, in Representation, to draw all the shapes of the composition in straight strokes or in strokes which have the character of angularity, all of them, or in strokes which are circular or elliptical in character. That gives a unity and harmony to the drawing of the shapes even when the shapes drawn are very different in character one from another. Shape-Harmony has been used with admirable effect by the Chinese and Japanese painters, and they have used it in writing as well as in drawing. It is a mannerism, however, and must be used with judgment.

Measure-and-Shape-Harmony

By Measure-and-Shape-Harmony I mean the repetition of a certain measure in a certain shape. As I have said, we can have the repetition of a certain measure in different shapes and the repetition of a certain shape in different measures. It is the repetition of a certain relation of measure and shape that is required for Measure-and-Shape-Harmony. This is not inconsistent with variety. If for example, you have a variety of objects to represent you can represent them in a repetition of similar measures and shapes with very good effect. We have an illustration of this in the exhibition in Museums of a variety of objects in frames or in cases of one size and design. The same thing may be done in painting. We have many examples on the walls of Italian churches, where a story is told in a series of pictures corresponding both in size and in shape. Measure-and-Shape-Harmony occurs constantly in Pure Design, but we do not expect to find it in Representation where we have to follow the measures and shapes of the objects represented and are presumably interested in the differences and varieties of them.

Variety not a Principle of Design

It is sometimes argued that Variety is a principle of Design, that a design, to be good, must show Variety as well as Harmony.

We have variety in Life and we have variety in Art. Art being the expression of Life,the variety of Life comes into Art, inevitably, but while it comes into Art it does not belong to Art. It is the subject matter of Art. It is what is expressed by Art. Art takes the variety of Life and puts it in order. Art classifies and arranges, separates and selects. Art shows us one thing at a time or two or more things together, when they belong together in one idea. Two or more ideas may be combined provided the two or more make one. The function of Art is not, therefore, to show us the variety of Life, but the

variety in the unity of a single idea. To start out with the idea of representing the variety of Life would be to imitate the particulars of sense and the accidents of vision, just as they occur or happen in visual experience: Light, Dark, Red, Orange, Yellow, Green, Blue, Violet, Up, Down, Right, Left, Straight, Round, Large, Small, and so on. That is the variety of Life so far as vision is concerned. That is Life as we see it and some of our contemporaries are trying to represent it in that way. That is not at all the idea of Art. It may be Nature, but it is not our idea of Nature. The kind of Representation I have just described is as untrue as it is unlovely. We must paint not what we see but what we think, not the accidents of vision but the ideas which we gather out of them which they suggest to us. For the sake of order and unity we must express one idea at a time or two or more in one. Nature as we think of it and understand it, Nature as it lies in the world of our ideas, is the supreme illustration of Consistency, Unity, Order and Beauty. Thinking of Nature in this way and wishing to imitate Nature, we try to be orderly; orderly in our lives, in our thoughts and ideas and in our actions and work. In order to live, to think and to act in the order of Nature we turn to Art in which the Laws and Principles of Order are clearly revealed to us. Turning to Art, we find at once how it helps us to think, how it helps us to act. Art helps us in every sort of work that we undertake. Presently we realize that it is by Art and Art alone that we are lifted up from the impressions of sense, from the accidents of vision, from the variety, the disorder, the confusion of visual experience, up into the world of ideas and ideals. These ideas and ideals have no correspondence, no existence, perhaps, in a reality beyond the terms of Art, but we think they have. A vision of Nature is revealed to us in which we see that the Laws of Art which we have been following are also the Laws of Nature; some will say the will of God:—

"Toi qui m'aimes, mets l'ordre dans ton amour. Il n'y a

pas de vertu sans ordre. Puisque tu désires tant me trouver, il faut que la vertu soit avec toi, . . . rien ne peut avoir de beauté que dans l'ordre. Les choses que j'ai créées je les ai créées avec nombre et mesure . . . c'est l'ordre qui maintient leur harmonie."[1]

THE ORDER OF SEQUENCE

The Order of Sequence is shown when in Drawing and Painting we proceed from one position to another, from one tone to another which may be like it, from one measure to another which may be like it or from one shape to another which may be like it and we do this in a regular and lawful way. In Painting we have sequences of positions, tone-sequences; sequences of values, colors and color-intensities; sequences of measures and of shapes, of attitudes and of intervals.

There are three types of sequence to be considered. First, the Sequences of Continuation or Repetition; second, the Sequences of Alternation, and third, the Sequences of Graduation or Progression.

Sequences of Continuation or Repetition

The Sequence of a Continuation or Repetition is seen in a line which the eye follows easily from beginning to end. The line may be straight, angular or curved. If the eye follows the line without difficulty the sequence is unmistakable. If the line is irregular, if the changes of direction are unexpected and abrupt, if the line returns and crosses itself so that the eye hesitates in following it or follows it with difficulty, the feeling of Sequence will be lost. If a line of continuations or repetitions is broken, the sequence is broken but not necessarily lost. If the eye finds another line which it can easily follow it will jump the interval and go on. It will not do this, however, if the direction of the second line at its beginning is not the same or nearly the same as that of the first line at its ending. The eye moves readily on all parallels, if they are not too far apart.

[1] L'Abbé Le Monnier: *Histoire de Saint François d'Assise*, 3d Ed. Paris, 1890, II, p. 216.

These Sequences of Continuation or Repetition have the very greatest value in connecting one part of a design with other parts, the several parts being comprehended perhaps in a single sequence or consistent relation of sequences. It should be observed that sequences are fundamentally linear even when they cover considerable areas. It is the road we travel on, which may be a wide one or a narrow one. All divergences in the line of continuation or of repetitions are inconsistent with the idea of sequence. To be consistent a sequence must be free from divergences and contrary motions. All divergences from the direction of the sequence and contrary motions must be corrected. This may be done by introducing lines upon which the eye is able to return to the sequence from which it has been drawn away. Leaving the road upon which we are travelling we must come back to it again. In some sequences the eye moves less easily and more slowly than in others. This is generally due to the presence of divergences or contrary motions. It is possible even to turn back for a moment and then to go forward again. That means delay, however, in getting on.

It should be observed that the eye is detained and checked in following a sequence not only by divergences in the line but by all attractions, contrasts and interests which hold the eye and keep it from moving on the line of the sequence, whatever that is. Such attractions, contrasts and interests should, in view of the principle of Sequence, be avoided. The idea of Sequence is of movement and the satisfaction and pleasure we get from any Sequence lies in its movement, not in divergences and other obstacles to progress. Other things being equal, the movements which are most agreeable are those which are consistent in character and easy to follow. It must not be argued that the sequences in which we move quickly and easily are for that reason the most interesting. There is many a road which is perfectly straight which has no divergences and is without obstacles or difficulties which is, nevertheless, a very stupid road to travel on. It may offer us the possibilities of easy and rapid motion and be a perfect

speedway and have no other interest. Unless we are in for the pleasure of easy and rapid movement the road I have described has no attraction for us. We prefer a road on which we are entertained as we go along. We have a perfect illustration of sequence in a straight line, but we get through it quickly and are not at all interested. We prefer, perhaps, to move slowly, even very slowly, if there is something to interest us, to make it worth while. We are quite willing to be swung off by divergences and contrary movements if they are entertaining and we do not mind being checked in our progress by interesting obstacles. So when we are considering sequences we must look, not merely for easy movements but for what may be interesting or delightful in movements. In other words, sequence is a mode of expression and the question is not only what the mode is but what is expressed in the mode. If we go in for Harmony and nothing else we have it in a sheet of white paper. If we go in for Sequence and nothing else we have it in a straight line. When the artist has established his sequence, which is a certain direction and form of movement, he can put into it no end of interesting features provided that he keeps the sequence unbroken and does not admit of diverging interests or obstacles which stop the movement and make it impossible. The interests and attractions which are set together in any sequence should have a logical connection and relation and the relation should be one of sequence. The first interest should lead us to the second, the second to the third, and so on. In that way unity is secured with no very serious loss either of interests or of attractions. The varied interests of Life are expressed with no sacrifice of Order and Beauty for the sake of Truth. In the Order of it and the Beauty of it, we see, also, the more profound Truth of it. Our interests lie too much upon the surface of things. We insist too much upon the accidents of life and forget its underlying principles. We must not forget the measures of time and of space in which everything is happening. We must not forget the Rhythm of Life.

Sequences of Alternation. Rhythms

I have described the first form of Sequence, the Sequence of a Continuation or Repetition. I will now describe the second form, the Sequence of an Alternation producing the combination of Harmony with Rhythm.

When any line or sequence is broken repeatedly and at equal intervals, we get alternations which give us the feeling of Rhythm. Rhythm means not a continuation merely but a continuation with regularly recurring breaks or accents. In sequences of Continuation we have the feeling of Harmony, that is all, but when the continuity is broken at regularly recurring intervals by a certain change we get in addition to the feeling of Harmony the feeling of Rhythm. In Painting, the feeling of Rhythm is due to a regular alternation of positions or of tones; values, colors or color-intensities; or to a regular alternation of measures, shapes or attitudes or to a regular alternation of two or more of these various elements of effect.

It is possible to produce the effect of Rhythm with an alternation of certain elements; other elements being, so to speak, imposed upon this alternation as concomitant variations. We may, for example, have an alternation of large areas of one shape with small areas of another and this alternation may be set in a line or sequence. The Rhythm being thus established, we can put a different composition and effect of light in every area of the sequence, whether large or small. The variety of these compositions must, of course, be properly subordinated to the unity of the movement in which they occur. If possible, the interests introduced into the Rhythm should be progressive. In this way we do what the poet does in his verse, when he puts his ideas into the measures of it and the ideas are in a logical order. What is possible in Poetry is equally possible in Design.

Life, as it goes on in the measures of time, in the alternation of day and night, of light and darkness and of the four seasons, is a sublime illustration of variety set in a rhythmic sequence.

It is a pity that we become so absorbed in the variety of this sequence that we are unconscious of the measures of it and forget that life is fundamentally orderly and lawful. I insist that it is the very first duty of the artist to remind us that Order is fundamental in Nature as in Art. I must quote Plato again; the passage in which he says, "If arithmetic, mensuration and weighing be taken out of any art that which remains will not be much." [1] Nothing is left but scattered particulars of sense and incoherent imaginations: such as we see in the works of the so-called Futurists who try to describe their sensations and imaginations just as they occur in visual experience, quite accidentally and lawlessly. It is a case where the "artist" gives us only the variety of life without the Order of it. We should be reminded by the pulsations of the blood, by the inevitable alternations of rest and labor, by the repetitions and routines of daily life and work that no representation of life is true which is not also a representation of the fundamental and everlasting Rhythm of it.

When it happens, as it so often happens, that we have some stupid, tiresome thing to do, day after day and year in and out, we may console ourselves by the thought that we are living very strictly in the order of a Rhythm in which, if we please, we can hear the Music of the Spheres. When we think of this we may find so much pleasure in the thought that we shall hesitate to break the order of our routine for any but a very good reason. There is more happiness than we think in the routines of daily life. This happiness lies, generally, in the region of subconsciousness, but we can pull it out if we want to.

Sequences of Progression

Besides the Sequences of Continuation and of Repetition which give us the sense of Harmony and the Sequences of Repetitions in Alternations which give us the sense of Harmony and also the sense of Rhythm, we have a third type of sequence

[1] *Philebus*, § 55. Jowett, IV, p. 104.

in which we have the feeling of an orderly progress from one thing to another, either upon the principle of an arithmetical or of a geometrical progression. The sequences of this third type I shall call the Sequences of Progression.

In Drawing and Painting these Sequences of Progression take the form of gradations leading from one tone to another, from one position, measure, shape or attitude to another, always by degrees. The changes are not only gradual but uniform in their character. They represent a certain difference or a certain multiplication. Because of the repetition or continuation of a certain change these sequences of gradation or progression have in them an element of Harmony which must be appreciated. We have gradations and progressions in painting in Pure Design also in Representation. They occur in our set-palettes. They are used in all form-drawing in different planes of light and they are fundamental in all effects of light and of color which are true to Nature and right in Art. Nothing is truly and well painted which is painted without regard to the gradations of color which occur in the gradations of light. The gradations of the set-palette may disappear in the composition of the picture, but they underlie the result and effect and help to give it consistency and unity. It is in Art as in Nature: the order of changes is not always seen in the effect or result but it is there all the same or should be there. The changes in themselves mean variety. The order of the changes means unity.

When we have classified the impressions of sense and our ideas according to likeness we find in the relation of likeness what we call Harmony. When we proceed in our classification from the consideration of likeness to the consideration of differences and begin to arrange things according to degrees of difference, we get the idea of a gradation and as we pass along in our gradation from one thing to another we have the sense of an orderly progress. The progression which leads us from one thing to another is not rhythmical. Rhythm means repetitions in alternations. Progress means, not Repetition but Transi-

tion. When we have arranged things according to likeness and according to differences, we can go further and arrange the things of one type according to their qualities, according to degrees of excellence or of inferiority. In so doing we discover, at the end of its progression, the highest excellence of every kind of thing.

When we turn, from the consideration of things in themselves, to their history and development we begin to observe how the differences of kind have come to pass gradually, and we can illustrate the history of each kind of thing in a series of examples, showing all the changes as they have occurred in the course of time, one after another. Nothing is more interesting and more instructive than these progressions of Evolution and of History. Science is largely occupied in working them out and making them clear. I sometimes wonder whether this is the work of Science or of Art.

THE ORDER OF BALANCE

The third form of Order and Principle of Design is Balance.

Symmetrical Balance

The simplest form of Balance is Symmetrical Balance. By Symmetry I mean the effect of an inversion. Take any arrangement or composition of lines and spots of paint, any effect of light, no matter what it is, and invert it so that you see the effect and the inversion of it together, side by side, and you have an illustration of Symmetry. It does not follow, however, that when you have Symmetry you also have Balance. For Balance the axis of the inversion producing Symmetry must be vertical. We may have Symmetry on any axis but Symmetrical Balance only on the vertical axis. It is an interesting exercise to produce inversions by drawing with two pencils, one in each hand. I can produce in that way a great variety of more or less interesting symmetries; that is to say if I have really done with the right hand what I have done with the left. If the axis of inversion is not vertical the

symmetry produced is sure to show an inclination to fall either to the right or the left, except in the case of circles which are in stable equilibrium no matter how you look at them. We find examples of Symmetry and Symmetrical Balance everywhere and at all times.

Symmetry is regarded as a recipe for the Beautiful. That is a grave mistake. The value of any inversion depends upon the motive inverted. The question is, as to the motive. What is the composition of lines and spots of paint, what is the effect of light and color, in any given instance of symmetry? Is the composition and effect beautiful or not? To enjoy Symmetrical Balance is indiscriminate, it is like enjoying repetitions and sequences, just because they are repetitions and sequences. The question is, what is it that is repeated, what is in the sequence, what is in the balance? We must be discriminating and fastidious in this matter, not easily satisfied or pleased. We should be pleased and delighted only when we discover the supreme instances.

Take a symmetroscope or some pieces of polished tin or pieces of mirror glass and study the forms of symmetry which are produced by drawing and painting along side of, but at right angles with, the reflecting and inverting surface. Invert, in this way, your composition of lines and spots; invert it on different axes and try constantly to distinguish what is best among the many occurrences of Symmetry. If you have access to a collection of textile designs you will find it interesting to compare the examples of symmetrical balance, with the idea of selecting the best. Another thing to do is to turn to Nature. Study the examples of symmetry which you find; in the crystals of snow, in plants, in leaves and flowers, in shells and in fish, in butterflies and insects, in the structure of birds and animals; the effort being not merely to discover illustrations of Symmetrical Balance, but illustrations in which the composition of tones, measures and shapes, the effect of light and color, is particularly interesting or beautiful. Don't look for Symmetry which you can find everywhere but for the supreme in-

stances of it. Symmetrical Balance is simply a mode of Order. Your interest is not in the modes of Order but in what you find in those modes. You are not a lover of Art because you are a lover of Symmetry, any more than you are a lover of Poetry when you know that it is verse you are reading, not prose. Tell me what gives you pleasure and I will tell you whether you are a lover of Poetry or not, if I am a good judge; but I may not be a good judge. You must judge for yourself. To like what I like because I like it is not at all discriminating in instances; it is discriminating in persons. When you follow the asterisks in your Baedeker it is Baedeker you admire, not the works of art which he has selected as the best. It is only as you use your own judgment that you get judgment. So when it comes to the consideration of Symmetries, make your own selection. It may not be a good one but it is yours and expressive. By your judgments ye shall be known; quite as much as by your works.

Unsymmetrical Balance

Besides Symmetrical Balance, there is another form of Balance which is less obvious and not so well understood. I mean Unsymmetrical Balance; in which the attractions, whatever they are, balance upon centers and all inclinations balance upon verticals. To understand this put down on your paper a number and variety of lines and spots and try to decide where the center of the attractions lies. The rule which you follow in determining the balance center is the familiar one: that equal attractions or equal forces of attraction (the attractions do not necessarily correspond in character) balance in opposite directions at equal distances from the center and unequal attractions balance also in opposite directions but at distances which are inversely proportional. This rule does not apply, of course, unless the center of equilibrium is clearly indicated, because the eye will move to the point of strongest attraction and stay there, if there is nothing to hold it anywhere else. The center of the attractions being discovered on the principle

above described, it will be necessary to indicate and emphasize it by drawing round it an all-enclosing circle in which you can see and appreciate the balance of attractions so determined. It does not follow, however, because the attractions are in balance, as attractions, that an effect of balance is produced. It is necessary not only that the attractions, as such, should be in balance but that all inclinations to fall to the right or the left should be counteracted. Having produced a balance of attractions on a center we must turn the composition on its center until it balances also on the central vertical axis and we have the composition in stable equilibrium. In other words we try to get the composition into an attitude which gives a balance of attractions on a center and a balance of all inclinations on the central vertical. Disregarding all ideas of representation the best attitude for any composition of lines and spots is the attitude which shows an equilibrium not only of all attractions, as such, but of all inclinations to fall to the right or the left. It should be observed that an inclination to fall to the right may be counteracted by an attraction on the left, in just the right place, which will so to speak hold up the inclination and keep it from falling. It should be observed also that inclinations balancing one another may be above or below one another and are not necessarily on opposite sides. It often happens that counteracting and balancing inclinations are all on one side of the vertical axis. They look after one another, as inclinations, while they are acting as attractions to be balanced by equivalent attractions on the other side which have no inclination to fall on that side. All vertical lines and shapes and all horizontal lines and shapes, being in stable equilibrium, look after themselves in that way and are simply attractions to be balanced, as attractions. When the composition is balanced on the central vertical axis the center which lies on the axis may be pushed up or down with all the attractions balancing on it.

As the eye, ungoverned by the will, is drawn into convergences of all kinds by the force of the convergences, as the eye,

ungoverned, moves through all sequences towards the end which is most attractive, moving from the lesser attraction to the greater, and as the eye moves more easily to the right than to the left owing to our habit of reading in that way — always to the right, we have certain forces of movement to consider which must be carefully distinguished from the forces of inclination which have been considered. The pull of the forces of convergence and of progression may be in any direction and they may be employed not only to balance attractions wherever they are but to counteract inclinations to fall either to the right or the left. The pull of the reading habit, being to the right, is counteracted by attractions or pulls to the left.

It should be observed that a large empty space, which catches and holds the eye because it is inclosed, may be balanced by a composition of many and varied attractions on the other side, the eye being no more held by the fullness on one side than by the emptiness on the other. This form of balance occurs constantly in Representation, where you may have all that is interesting in the representation on one side and only empty space on the other, the fullness and the emptiness being framed in together.

It should be observed, also, that we are attracted not only by the lines and spots of the composition but also, particularly in Representation, by what interests us. The appeal is often rather to the mind of the beholder than to his eyes. The object of most interest being on the left it may require a lot of visual attractions, pulls and inclinations on the other side to effect an equilibrium. The equilibrium will then be appreciated partly in the eye and partly in the mind behind the eye. An object which is seen to be moving toward the left pulls the mind in that direction. The direction of a growth being to the right the mind goes with it, inevitably. The movement of the mind has to be considered as much as the movement of the eye. These less obvious and more or less occult forms of balance occur constantly in Representation.

The trained plants and the flower arrangements of the Japanese may be referred to as examples of skill in achieving an equilibrium and stability for unsymmetrical attractions, pulls and inclinations, visual and mental. The reader is referred to the Japanese books (there are many of them) in which this art is illustrated if not explained. I remember, in a certain Japanese play, that when there were three personages on one side of the stage and three on the other and one passed over throwing the composition out of balance, one of the then over-balanced two pulled out a gold fan and made a flashing of light which served perfectly to maintain the equilibrium. It is only among the Chinese and Japanese that such subtleties have been practiced and appreciated.

Wonderful illustrations of equilibrium and stability in unsymmetrical compositions will be found in the Japanese color-prints. They represent a tradition of Unsymmetrical Balance which goes back to prehistoric times. The supreme instances are found in early Chinese paintings of the Tang, Sung, Yuan, and Ming Dynasties and in Japanese paintings of the Fujiwara, Kamakura and Ashikaga periods.

Having considered the examples of Unsymmetrical Balance which come to us from the Art of China and Japan we should turn to the examples which we have in the European paintings of the Middle Ages, of the Renaissance and of Modern times. Very fine examples are to be found in the paintings of our old masters. We should be particularly interested in them because the balances are achieved in realistic and often very complicated effects of light, effects in which the forms are cut up and more or less concealed by dark shadows and cast shadows. The problem, as it has been solved by the Chinese and Japanese painters, becomes a much more difficult problem when the problem of form in light and shade and in cast shadows has to be solved at the same time. The solution of this double problem by the great masters of the Renaissance is very wonderful.

When we come to the consideration of Modern Painting

the examples of Unsymmetrical Balance we are looking for are not easily found. The sense of Balance is passing. The painters who ought to be thinking about it are not thinking about it. They are wholly absorbed in the difficulties of imitation. In view of their impressions, which they are trying to reproduce, they have no attention to give to the problems of Balance or to any other problems of Design. Starting with the particulars of sense and the accidents of vision they are trying to rise into the world of ideas, but being unwilling to give up what they see for what they imagine they cannot do it. The impressionist painter has no more afflatus than a turtle. It was a dear old friend of mine who said that of a certain poet. It applies equally well to the painters who, starting upon a basis of statistics, endeavor to rise into the world of ideas without the sacrifice of a single fact. The Art of Unsymmetrical Balance has almost passed away. It is passing, even, with the Japanese who, during the past fifty years, have been converted from the Love of Order and Beauty to other and very different interests.

ON PURE AND APPLIED DESIGN

THE art of Pure Design is the art of arranging lines and spots of paint in the different forms of Order, — in Repetitions, Sequences and Balances. Pure Design must be distinguished from Applied Design. In Applied Design, design is not an end, but a means to an end, the end being to do something useful or otherwise desirable, but to do it in good form. When we dance; when we sing or play upon instruments, making music; when we are arranging lines and spots of paint in the forms of Design; we are engaged in what may be called the Pure Art of it. Our motive is simply to achieve Order, if possible, Beauty. When, however, we apply and use the principles of Design, in Representation, in Architecture, in Sculpture, or in any of the so-called Minor Arts, our motive is not, as a rule, the motive of Pure Art. It is a mixed motive. In Drawing and Painting in Representation, for example, our motive is to achieve the Truth of Representation, and that is our motive in Sculpture when we undertake to represent the human figure or any other object in Nature. At the same time we want our statement of the Truth, whether in Painting or in Sculpture, to be orderly and, if possible, beautiful, and faultless in its workmanship and execution. Plato says:[1] "Even if we know that the thing pictured or sculptured is a man and know that he has received at the hand of the artist all his proper parts and forms and colors, must we not also know whether the work is beautiful or in any respect deficient in beauty?" That means that the work must be well done as a work of Art, or in Plato's phrase, "well executed in melodies and rhythms." In Building and in the other arts and crafts, the object is to do what will be useful and serviceable and to do that as well as it can be

[1] *Laws*, II, §668. Jowett, V, p. 239 *et seq.*

done, in a systematic, orderly, if possible, in a beautiful way; with a distinction which belongs, not to the thing done but to the way it is done. Design is applied in these arts as a means, not as an end. The end lies in the purpose or use of the work, not, as a rule, in the Order or the Beauty of it.

If the value of an object lies in its design or workmanship and not in its purpose or use, it becomes, *ipso facto*, an object of Pure Art. As such it is appreciated not in its use but as an expression of the Love of Order and the Sense of Beauty, or of a delight in technical excellence and perfection. In view of the Art of the Past we see that Design has not been very much practiced as an end, on its own account, except in Dancing and in Music. The illustrations of Design in Drawing and Painting are found, as a rule, in surface decorations and in representations.

As we become more and more interested in Design, as shown in objects produced for other reasons than the reasons of design, we begin to think of the possibility of an Art of Pure Design and a profession of Pure Design. Why not? Lines and spots of paint can be arranged in forms of Order just as we arrange sounds in Music, for no other reason than to express the Love of Order and the Sense of Beauty. The appeal of Music is to the ear. The appeal of Drawing and Painting in Pure Design would be to the eye. Music is a profession. Why should not the practice of Pure Design become a profession?

It is conceivable that the practice of Pure Design may lead to the development of a profession of Pure Design, and such a profession would, naturally, take its place alongside of those of Music and of Dancing; in which the same motive and the same principles are illustrated in different ways. It is doubtful, however, whether this art of Pure Design will ever attract or interest the public. In performances of Dancing and of Music we follow the performers with our eyes and our ears. In so doing we are almost persuaded that we ourselves are dancing and

making the music. Therein lies almost all the pleasure of it for the spectator and the listener. The designer in lines and spots of paint produces his designs, as a rule, in some place of his own where nobody can see or follow his performance. Designing in lines and spots of paint is generally a slow process, too slow to follow. The spectator will get restless and impatient long before he can see what is coming. Then we cannot make our drawings large enough to be seen, as we draw them, by more than a few people, fifteen or twenty, perhaps. Public performances are, therefore, out of the question and we may be sure that the public, if it cannot see the performance, will take little or no interest in the result of it; unless it is in some way useful or serviceable. That is what a performance in Pure Design is not supposed to be.

We have examples of Pure Design in textile fabrics, plenty of them, wonderful examples, but the general public is not at all interested in textile fabrics, except as they serve some purpose. The ladies are very fastidious about the materials made for clothing, but they are not so fastidious about the designs woven in them. The materials must be the very best, of course, and suitable for the purpose. That is all that is required. I was showing a beautiful design woven in a certain fabric: I was showing it to a lady, and I said to her, "You ought to have a dress made of that material." She replied, "No, it would not do at all for a dress but it might do for an apron." People are buying textiles constantly for clothing, for upholstery, for curtains and wall hangings, and they consider the designs carefully, but only in view of the particular problem they have in mind. The most exquisite example of the art will be turned down and a comparatively worthless thing preferred, because it is more suitable. That is all right. I don't object, but it does not promise much for the development of Pure Design as an Art by itself. We must not think of Pure Design as a profession to be undertaken and practiced as other professions are. For the present and for a long time to come it must be regarded simply as an educational discipline of great value

in establishing good habits and proper states of mind. The practice of Pure Design is required as a training for citizenship and I am prepared to say the same thing of Music and of Dancing. We have in Music, Dancing and Pure Design the best preliminary training that there is for Citizenship — but this is a paradox and requires an explanation.

THE PRACTICE OF DESIGN AS AN EDUCATIONAL DISCIPLINE

The practices of Music, of Dancing and of Pure Design should be introduced, not only in the kindergarten and elementary grades of our schools, but in the higher grades as well; and in colleges and universities. They should be introduced not at all as amusements; unless we think of amusement as a very serious pursuit of Apollo and the Muses. They should be regarded as a training and discipline in which success is very difficult to attain but worth attaining, not for its own sake but for its consequences. It is quite as difficult to attain excellence in the invention, recollection and performance of the motives of Design as it is to recollect and state accurately and well the facts of History or the Principles of Government or of Economics; and I doubt, very much, whether the ability to state and illustrate these facts and principles is half as helpful, as a preparation for good citizenship, as long continued and serious efforts in Music, Dancing and Pure Design. The problems of Design are problems in Righteousness. The practice of Design is a practice of Righteousness. The question is, constantly; am I doing it right or not? The effort is to do it right, right every time, exactly right, and there lies the value of it. The value of Design as an amusement for the performer or an entertainment for other people is insignificant as compared with its value as a training in Righteousness. I doubt whether the sense of duty can be better developed than by exercises in Design when they are properly conducted. The repetitions must be exact, the sequences faultless, the balances perfect. The student trying constantly to do the right thing gets into the habit of doing

it, as a matter of course. When his practice of Design is ended and it comes to the applications of Design in the conduct of Life, he will be constantly thinking about his activities as if he were designing, as if he were making Music or Dancing or Painting. Are my Repetitions exact? Are my Sequences logical and consistent? Are my Balances perfect? Have I done it as well as I did it before: or better? Am I doing it better and better? Progression is better than Repetition. Am I making progress? I hope I am not breaking the law of Balance. I shall surely break it if I do not give an equivalent for what I get. I must be just. The principle of Balance is the principle of every fair deal and every act of Justice. If I have learned nothing else in my exercises in Balance I have learned to avoid excess. I have learned the value and necessity of moderation ; far better than if I had simply read the words "Nothing in excess" as they were written on the walls of the Temple of Delphi. Having patiently and conscientiously performed my exercises in Design I am well used to routine; used to doing the same thing again and again, following the same order of actions, the same sequences, repeatedly. Having done this in Music, in Dancing and in Pure Design I am prepared to submit patiently to the inevitable routines of daily life. I am used to routines but I am also very critical about them. I instinctively avoid all inconsequent actions because they are disorderly. I love the syllogisms of logic, the sequences of good reasoning. I try to be logical. I try to follow reason for the sake of Order. It is law and order that I want, law and order in my own life and in everybody's life and in the *ensemble* of all lives. It is the one thing I care for: and the beginning of it all was in those exercises in Music, in Dancing and in Pure Design which I conscientiously performed when I was a child in school.

Taking this point of view, as I do, it seems to me that the practice of Music, of Dancing, and of Pure Design is of far more practical value than a knowledge of History or an understanding of the principles of Government and Economics.

I am not at all disposed to undervalue these particular attainments of scientific knowledge. I want simply to insist upon the importance of doing things, upon the importance of beginning very early to discriminate between right and wrong and getting the habit of doing the right thing at once, as if it were the inevitable next sound in Music or the next step in Dancing. I insist, also, that an understanding of the fundamental principles of Order which are the principles of Nature and of Art is quite as important as any other understanding under the sun, and I am sure that it is best attained through a practice of Pure Art.

The educational value of Music, Dancing and Pure Design is recognised and fairly well appreciated by teachers in the Primary and Elementary Grades, where these disciplines have been established and their value in some measure proved: but there is very little recognition or appreciation of their value in the Higher Grades or in our Colleges. This may be due to the fact that the teaching of Music, Dancing and Pure Design in the Elementary Grades has not been very successful. I admit that, but I see clearly why it has not been successful. There is a lack of intelligence and understanding on the part of the teachers. They don't take the right point of view. They don't see clearly what they are aiming at. There is a lack of definiteness in the instruction which they give and there is nothing like serious discipline in the exercises, as they are generally conducted. It is only as the exercises are really serious, it is only as they mean doing it right, exactly right, and never making a mistake, that they have the value I am describing. The singing in the schools is very inaccurate; out of tune always and generally out of time. The dancing is careless and irresponsible. Very few of the children keep time accurately and spaces are not kept at all. In Pure Design as practiced in the elementary schools the principles are understood only in the most simple and obvious forms. Repetition is understood in its idea but not in its applications. So it is with the principle of Sequence. It is not at all well understood in its

applications. In the exercises in Drawing and Painting, symmetrical figures, which are vertically oblong are set in horizontal rows, and the result is called a rhythmic sequence, but it is a sequence which cannot be read. The sequence is horizontal but all the elements of it are vertical. Sequences of Repetition, where two or more lines flow along together, are constantly described as Rhythms when there is no regular alternation to produce a rhythm. Sequences are constantly spoiled by inconsistent divergences and cross movements and nobody knows why they are so unsatisfactory. Balance is considered only in the obvious forms of Symmetry and there is no discrimination in instances of Symmetry. One example is supposed to be just as good as another. Unsymmetrical Balance is not at all well understood. There is little or no attempt to train the children in this very important form of Design. The practice of Pure Design, as it is conducted in the schools, is, certainly, not serving its purpose as it would if the Theory of Pure Design were better understood and more rigorously followed.

As this is a book on Drawing and Painting a particular consideration of what the training should be in Music and in Dancing is irrelevant, but it is proper that I should describe and explain, so far as I can do so, without examples and illustrations, what I mean by the Practice of Pure Design.

We may begin the practice by producing some of the set-palettes which I have described; each palette being a very simple illustration of the ideas of Repetition, of Alternation, of Gradation, of Sequence and of Balance in tone-relations. The tones of the set-palette should be produced with the greatest possible accuracy and every tone severely criticised as to its value and as to its color. The color should in each tone be as intense as possible, the proper pigments being used.

Water colors may be substituted for oil colors in Pure Design exercises, but I do not advise this. The palette being produced with oil pigments you see just what tones you have to use, what colors, in what values; and you use the tones as you want them, mixing within the limits of the register but not

between registers. The palette which you produce in water colors is a palette of samples. The tones are produced upon a white card. You see what the tones are, but if you want to use them you have to reproduce them according to the samples. You have to do this again and again if you use the tones repeatedly. Intermediates have to be first produced on the card and then reproduced as they are required. That makes the use of water colors, which is convenient in one way, very inconvenient in another. Painting in water colors is all right when it is done by a master who knows from experience exactly what he wants to do and does it easily because he has had the practice. He has his tones, not on a card, but in his mind, and mixes them according to his ideas. He thus produces an effect which he distinctly imagines before he produces it. He does what he has done before, many times, and expresses himself easily and correctly. Not so the beginner. He has no idea what he is going to do until he has done something. Then it is done and there is no help for the disorder and mess of it. With a palette set for oil painting he sees his tones before him and selects the tone he wants; and the tones being in an order, something of that order comes into the work, inevitably. In view of these considerations the teacher will probably have the tones of the set-palette produced in oil pigments and put in tubes. They can then be put out on the palette as required. After many years experience I have given up the use of water colors in the class room. I have given them up for the sake of definite thinking and orderly results. My assistant has the bother of it, when he has to clean the palettes and put everything in order after the class has dispersed, but the lesson has, I am sure, been more instructive, and the results, the designs produced, are much better from every point of view. A great deal of the work to be done in Pure Design is drawing rather than painting, and it may be done with pencils or crayons, which obviates the use of the palette when it is not needed. A palette-sequence of colored crayons, if it can be had, will be very useful in training children who cannot be trusted with oil paint.

It must be remembered that in teaching Design we are teaching Order, order in drawing and painting, and in everything else; order in our thinking, order in our actions, order in every kind and sort of work. Disorder, therefore, is to be avoided as much as possible.

> "Keep away from dirtiness—keep away from mess.
> Don't get into doin' things rather-more-or-less!
> Let's ha' done with abby-nay, kul, an' hazar-ho;
> Mind you keep your rifle an' yourself jus' so."[1]

These lines of Kipling should be set up in every school room as giving the rule of the place. Our teaching will have no effect whatever if we allow the work to proceed in a disorderly and messy way. I remember the occasion when I said to my class that those who had put the paint and the oil upon themselves and on the chairs and desks and on the floor instead of putting it on their designs and pictures must pay a fine, not only for the waste of materials but for the bad example. Cleanliness and order must be maintained, seriously if not religiously, as a very important part of the teaching.

Having produced the tones of the palette, the next thing to do is to repeat the tones, one or more of them, in all-over repetitions, producing illustrations of Harmony. The tones must be evenly laid; the repetitions exact. Then the student must continue and repeat his tones in linear sequences, drawing the lines straight or angular or curved and, for the sake of order, regular in their straightness, angularity and curvature. It will not be enough to draw each line once. It should be drawn again and again until it is drawn easily and perfectly according to the idea. We should give the student the exercise which the Chinese boy has in writing his characters, drawing each one again and again until he does it perfectly. I advise the use of the brush and Chinese ink in some of these exercises. The student should then proceed to the invention and repetition of motives, motives composed of two or more tones in a com-

[1] Kipling: *The 'Eathen.* Last lines.

position of lines and spots. The repetitions should be made on the tone of the paper or some other tone. The repetitions should be made first in all-over patterns and then in linear sequences of the different types. When the repetitions are in linear sequences the motives repeated and alternated should be in sympathy with the direction of the sequence, not contrary to it. Divergences and cross movements should be avoided. The sequence may be achieved in the form of an alternation of two or more motives or in the form of a gradation or progression of tones, of measures or of shapes. The repetitions and the alternations must be exact in every respect and the gradations perfect. When the thing is not right it must be done over again; with a reasonable allowance for the beginner who has not yet acquired the requisite skill. The value of these exercises depends very much upon the mental attitude of the performer and of the teacher who directs the performance. It is work, not play. It is work to be well done. A standard must be given by examples and the standard must be a high one. In saying this I am not forgetting what the painter Chardin said:[1] "Celui qui n'a pas senti la difficulté de l'art ne fait rien qui vaille; celui qui l'a sentie trop tôt, comme mon fils, ne fait rien du tout." It is quite possible to spoil the effect of these exercises by making them too severe; by discouraging the children and making them feel the difficulties rather than the possibilities. We must not allow our education to commit suicide.[2] Every care must be taken to make the work interesting and, if possible, exciting. The establishment of competitions from time to time or even in every exercise is a good way of keeping up the interest. The children should feel that there is no distinction except for those who do well. Those who do well are approved and promoted. Those who fail are degraded. The children must feel that they are working not for the approval of everybody but for the approval of the one person who knows what is

[1] De Fourcand: *Chardin*, p. 19.

[2] Plato: *Laws*, § 641. Jowett, v, p. 211.

excellent and what is perfect when he sees it. This knowing person should, of course, be the teacher. It is very unfortunate if it is anybody else. It must be understood that in Art we do not try to please everybody but "always the one person who is preëminent in virtue and education."[1]

The next exercise should be an exercise in Symmetrical Balance, an exercise in achieving Symmetry by means of inversions on vertical axes. In this exercise the student will do well to draw with both hands and two pencils: also with a piece of tin, using it as a reflecting surface. Holding a flat piece of tin on the paper and at right angles with it, the student will be able to see what the inversion on the vertical axis is going to be in each case. As he draws one side of his symmetry he sees the effect of both sides and is able to decide whether he likes the effect. When he has achieved an effect which gives him pleasure he lightly draws the axis with his pencil and proceeds to complete his symmetry by drawing the inversion which he has just seen in reflection. With a tin angle the student will be able to invent motives for radical symmetries. The symmetrical figures produced in this way may be regarded and taken as motives for all-over repetitions or for repetitions and alternations in different forms of Sequence. In repeating any motive in a linear sequence the repetitions must be accurate and the intervals established between the repetitions maintained correctly in their proper measures, just as in Music and in Dancing we repeat the motive or motion at certain intervals and make sure that the intervals, whether of time or of space, are correct.

There should be no measuring to get the repetitions right, no measuring except by the eye, and the repetitions should not be mechanically accurate. What we want is not the repetition of certain forms but the recurrence of certain ideas which must be expressed expressively: that means with emotional variations which are natural and proper. There should be an analysis and previous understanding of what is to be

[1] Plato: *Laws*, II. § 659. Jowett, V, 229.

done. The order of the performance should be predetermined. That is very important. The theory must be well worked out before the practice begins. The repetition must be a repetition of actions rather than the repetition of an effect. There must be no impressionistic imitation or copying of the composition which is to be repeated. It is a performance that is repeated: the ground tone first, then the black line, then the red spot, then the three blue spots in a certain order; lastly the dash of gold. The child must feel exactly as if he were singing or dancing. If the exercise could be performed in time measures, a metronome being used to mark the time, the exercise might be made almost as exciting as an exercise in dancing. These exercises in Repetition, as they are generally conducted, are trials of patience. They should be exercises in thinking and in acting quickly and accurately according to the thought. There should be a close correlation of thought and action, soul and body. The value of these exercises lies just there.

It is not a bad plan for the teacher to do the thing on the blackboard, as it ought to be done. The children can then imitate his performance instead of copying his design. The results of this method ought to be very interesting. There will be no tiresome copying to be done and the repetitions will be expressive. There will be variations due to personal impulse and emotion which will bring variety and liveliness into the results achieved. There is nothing more stupid than repetitions mechanically produced and nothing more delightful than repetitions when they are achieved emotionally like those of Music and Dancing.

Finally there must be exercises in Unsymmetrical Balance. The best form of exercise is the one I have already described. Put down on the paper a number and variety of attractions; a lot of lines and spots representing nothing: then find the balance-center according to the rule given on page 75: then, to bring the composition into stable equilibrium on the central vertical, turn it on its center until all inclinations to fall one way or the other are counteracted. The composition must

then be enclosed in a circle or in a rectangle which will frame it symmetrically and show where the central vertical axis is. The center of the attractions may be pushed up or down on the vertical axis but it must not be moved away from that axis either to the right or to the left. Another exercise will be to establish the vertical axis first, then to draw about it various lines and spots showing attractions, inclinations and movements: then, with a view to bringing these various elements of effect into stable equilibrium without changing these lines or spots, to add other elements as the case requires. In this practice of Pure Design we ought to illustrate all the different forms of Unsymmetrical Balance and should become so familiar with them that we feel at once when a composition is unstable and out of balance and think what we can do to correct the error.

There is no rule for the invention of Motives in Pure Design. There is no rule for the invention of motives in Music or in Dancing. The Motive, unless it is an imitation or reproduction, depends upon the imagination of the designer, and he must think of it, not in his head, but at the point of his pencil or brush. When he has no brush and has to do his thinking in his head, he must imagine a brush and transfer his thinking to the end of it. In the beginning it is wise to think at the end of a real brush. Starting with a dot or a spot or a line we must wait until what we are to draw next appears, ghost-like, on the paper. When it appears we draw it. It may be that we think of different things to draw. In that case we must decide which one of two or more ideas we will express. That means that an exercise of intelligence, of discrimination and of judgment, is required. In view of alternative ideas we are obliged to give precedence to one or the other. In this dilemma, trying to decide what to do, it will help us amazingly if we know what other people have done. With that idea we turn to the Art of the Past.

The best illustrations of Pure Design will be found in a collection of textile fabrics and embroideries. Every Museum of Art should have a collection, carefully selected and well

arranged for the use of students. The collection should contain Peruvian and Coptic fabrics, which are the earliest fabrics we have with designs, and they are very interesting. There should be examples of Saracenic, Arabic, Byzantine and Sicilian weaving. These examples date from the fifth century to the fifteenth and are among the finest illustrations of Pure Design that we have. They are very rare, however, and difficult to obtain. A very small fragment often costs some hundreds of dollars. Then we have the Italian and Spanish brocades of the fifteenth and sixteenth centuries, less rare and less costly but often very beautiful. The seventeenth and eighteenth century designs are good in coloring but they are not so good in measure and shape relations. There are good Arabic and Turkish embroideries, however, of this later date. The Flemish, French and Italian tapestries are important. The early pieces are, as a rule, the best, and the Flemish and French tapestries are finer than those of Italy. Particularly delightful tapestries were done in France in the time of Watteau, Boucher and Fragonard. In the study of tapestries, however, we are really in the region, not of Pure Design but of Representation in forms of Design. In tapestries we have examples of painting in Representation in which the paint is not put upon a woven canvas but upon threads to be woven together afterwards. Among the most beautiful textiles that have been produced are the Persian brocades and velvets and the Persian carpets. These should particularly command the attention of the collector and the student. Besides the Persian carpets there are other carpets to be studied of more or less interest. Wonderful fabrics were produced in China and Japan in early times but very few examples are now to be seen. A lot of scraps and a few larger pieces have been preserved from the eighth century in the Imperial Treasure at Nara called the Shōsō-in. The Japanese brocades of the seventeenth and eighteenth centuries, which are not particularly rare, are often beautiful. Those of the nineteenth century are less attractive and now the art has quite passed

away. The Chinese carpets of the last dynasty are fine in design and they are certainly splendid carpets for use. That is what they were made for. The Chinese embroideries of the past three hundred years have a special interest. They are, perhaps, the best examples we have of color composition in which there has been no hesitation in using the colors in their highest intensities. The contrasts of color are very strong and the effects are often very splendid. No collection of textiles is complete, certainly, without examples of Chinese embroidery. The Chinese are now casting away their beautiful old clothes and putting on coats, waistcoats and trousers as more appropriate for the citizens of a Republic, as they are, no doubt; but I am sorry that the most beautiful type of dress that the modern world has known should pass away. All the beautiful things are passing away. The lover of Art no longer produces works of art. He collects them and expresses himself in that way.

What we are is very clearly seen in what we like. Our discriminations, preferences and selections are our most unerring critics and judges. If we do nothing but observe, discriminate, prefer and select, we express ourselves unmistakably. We are supposed to do more than that but it is not necessary to do more than that. That is work and it is hard work. The profession of the connoisseur and collector is a highly respectable one in which nobody attains success and distinction without working very hard for it. It takes years of application and effort to reach the finer discriminations upon which unerring judgment rests, if there is such a thing as unerring judgment. A good judgment has the value of a work of Art, though its terms may be few and brief. If the connoisseur becomes a collector we see his judgment in the objects he collects. The work of his art lies in the collection he makes. To collect works of Art, making no mistakes, is almost, if not quite, as difficult as to produce them. It is a very important kind of work. It means selecting and gathering together the best thought of the world as it lies in the best forms of expression.

It means showing people what to think and what to do and how to do it. That is the service of the connoisseur and collector. He renders this service, of course, only in the measure that his collections are accessible to the public or at least to serious students.

The first thing to do in the study of examples is to distinguish the different types and kinds, but we must not stop when we have done that. We must go on, at once, to discover in each type or kind what is excellent, what is best. If we stop when we have distinguished the different kinds or styles and proceed to work in these kinds or styles we shall get nowhere. That is the fallacy of what is called the Study and Practice of Historic Ornament. It is a profound mistake. It means mastering some kind or style of thing in its most general and superficial characteristics and then reproducing those characteristics in your own work. Having studied examples of Greek Art, for a week or two, with the idea of distinguishing what is Greek from other things, you proceed to do something in the manner of the Greeks. You have not had time to look for the excellence or perfection of anything. You have probably seen nothing Greek; only reproductions in books. You have extracted the motives or forms and you have ignored everything that was in them. You have taken the motives or forms perhaps from the woodcut illustrations prepared by the teachers of Historic Ornament. At the end of a week or two you are all ready to produce something in the manner of the Greeks and you do it. A student of Historic Ornament once said to me, "When any one speaks of Design the Greek Anthemion occurs to me and I draw it. That is my idea of Designing. I have no other idea." The study of Greek forms is, as a rule, superseded by an equally superficial study and senseless practice of other kinds of Art. A few weeks must always be given to the study of Japanese Art. It prepares one so well for the production of wall papers! The forms are not so obvious in Japanese Art as in Greek Art. The symmetry which is seen in the Anthemion must be avoided. What you want is an all-over repeti-

tion of a variety. You can see what that means in the books. Possibly you may get a sight of some Japanese brocades in which you can see the variety and see, also, where the variety ends and the repeat begins. A great variety repeated without symmetry, is the simple recipe for Japanese Art. It is a recipe which is very easy indeed to follow. So it goes on. You study Greek Art and Japanese Art, Egyptian Art and Byzantine Art; the Art of the Alhambra and the styles of Louis Quinze and of Queen Anne. Then it is simply a question whether you produce a design of peacocks in green-blue and gold or a design of cupids in a summer sky with ribbons and other well known accessories. You are thus well prepared to decorate the houses of the rich in any style which they happen to prefer. The rich man knows what he wants, and he has only to tell you what he wants and you do it. If he changes his mind, as he does very readily, and wants something different, it is all right. You are prepared for any contingency, but for Business rather than for Art.

The practice of Art is not a practice of kinds or of styles. It is an exercise of skill, a practice of technical excellence and perfection and an expression of ideas. It means, having something to express, and expressing it well. It helps us, of course, when we have a standard in mind; a standard of thinking and a standard of expression. It is with that idea and no other that we turn constantly from what we are doing ourselves to consider what others have done. It takes a lot of time, however, to get a high standard. It means judgment. To get judgment we must pass judgment. To get a sure judgment we must pass judgment a great many times. We must not follow the judgments of other people but our own, always. When we have compared examples and instances one with another, selecting what seems to us best, and go on doing that for some years (not weeks but years) we come at last to make our selections very quickly and easily, and our judgment, trained by constant exercise, becomes almost unerring. In this exercise and practice of judgment we do not necessarily refer

to the principles of Design or think of them except in a general way. We recognise repetition, we see that there are sequences and balances, we recognise kinds, types and styles, but our judgment is not between kinds, types and styles of Design on the one hand and examples of Design on the other: it is between one example and another. The question is, which example gives us the most pleasure in the sense of vision. It is only when we have reached the end of all our comparing and discriminating and judging and have decided what pleases us best that we turn from appreciation to analysis. We do this when we want to discover just what it is that has pleased us so much, when we want to discover, so far as we can, the cause or causes of our pleasure.

We shall find the explanation of what pleases us partly in the motive or idea, partly in the form or design given to the motive, and partly in the performance as an exhibition of technical skill. The motive or idea is presumably expressed and clearly expressed. There is nothing to explain about that. The technical skill of the performance must be appreciated. The importance of technical skill cannot be overestimated, and there is nothing more stimulating and inspiring than a striking instance of it. The skill which we admire, however, is personal and may be inimitable. What we have to study particularly is the form or design in which we see the motive or idea on the one hand and the execution on the other. What we want to do is to get the motive or idea and the form or design into our minds very clearly so that we can recollect it when we have occasion to do so. We want, also, to follow the execution closely with the idea of acquiring, if possible, the technical skill which we so much admire. What method of study shall we follow? The best thing to do will be to copy and reproduce what we particularly admire. Copying a design is like reading a book. We go over every line and spot of the design just as in reading a book we go over every word of it.

Before proceeding to reproduce the "masterpiece" we have

selected we must thoroughly understand it in its construction. We must see what the materials are that have been used, what methods have been followed in using them, how the materials have been used, how the effects have been produced. We must see what repetitions there are; what harmonies in the tones, measures, shapes, intervals and attitudes. We must not only follow but we must understand the sequences which occur and see exactly what has been put into them by the master. We must note the use of Symmetry and other forms of Balance, and we must see what the master has put into his balances to make them interesting. In other words we must thoroughly understand the work we are reproducing before we proceed to reproduce it. How can we properly reproduce and express an idea without understanding it? The imitation of visual impressions, without understanding, may give us the visual impressions but it will not give a comprehension of them. In following our impressions only we may miss the idea. As soon as we understand the work of the master in its construction and technically, we may proceed to reproduce it. We must not put the work we are copying off at a distance and draw it in any size we please. We must draw it in its own size, if possible. In order to do that we must set up our drawing board alongside of the work we are about to reproduce, to the right of it, and we must reproduce it from left to right; spot for spot, line for line, measure for measure, shape for shape, the shapes in their measures and the measures in their shapes. The tones must, of course, be reproduced with the same care and precision: tone for tone. The object of all this care, painstaking and accuracy is not at all to reproduce the work before us but to get it accurately into our minds through the sense of vision. Our object is to have the motive or idea, the form or design and the execution, all clearly fixed in the sense of vision, ready at any moment to serve the visual imagination, giving it the knowledge which it requires and the stimulation and inspiration which it ought to have, to make its activity worth while.

The motives and ideas which occur to us, which we invent, so to speak, are very largely made up out of the ideas which we find in the works of other men. Studying these works as we should, constantly, and studying only what gives us the most pleasure, what seems to us best, we fill our minds with the motives and ideas upon which we proceed, imitating and at the same time creating. In this way we come to what is called a Movement in Art. It is based upon the effort of the individual, when he has done something which is approved. His idea is taken up and repeated with variations by other individuals. Each individual is at once a cause and an effect. He is a cause when he influences others. He is an effect when he is influenced by others. There is nothing in a movement of Art which is impersonal. The cause of the movement lies in some particular work of some particular man. The result lies in the sum of all its consequences, in the works of the different individuals who have been influenced and are themselves influencing one another. Who are they? In answer to this question we must take them up one after another and consider each one. We shall find that one counts for much, others for little. The general character of the movement is seen in the work of a few leading men. It is best seen in the work of its greatest master. It is a man who thinks, not men. It is not the crowd that thinks but the individual in the crowd. If the crowd is moved by an idea we must look for the man who first conceived it and expressed it, or for the man who conceived it most clearly and expressed it best. It is he who is the head of the movement. At the same time the credit is not his alone. He was influenced before he became himself an influence. We ought to be able to discover the sources of his influence, his thinking and activity. They lie in the works and ideas of still other men. It follows that we must be all the time looking about for single ideas and the men who conceived them. If we look about for forms or modes of expression, for Repetitions, Sequences and Balances, for certain kinds of things or styles, we shall find them, of course, but we shall probably

miss the ideas expressed in them. The forms and modes of Art are common to everybody. They are merely the means of expression. We must look for what is expressed. Referring constantly to the Art of the Past, seeking the best in every kind, particularly the best of the kind that gives us most satisfaction and pleasure, we go ahead and do our work. The value of it lies, not in the principles of Design which it illustrates, but in what is expressed of the Love of Order and the Sense of Fitness and Beauty. Ignoring good precedents and proceeding with no standard, the value of our work may be negative. Instead of expressing the Love of Order and Beauty it may perfectly well express a liking for Disorder and a preference for the Disreputable.

Am I forgetting Nature, insisting thus upon the influence of Art? Not at all, but it is very difficult to draw a line between Nature and Art and to be sure that we are not influenced by Art when we think we are influenced by Nature. Nature as we know her and think of her is to such an extent a creation of Art! Nature from the painter's point of view, for instance, lies in sense impressions and the accidents of vision. The study of Nature is, strictly speaking, a study of sense impressions. We have in these impressions not ideas but only the material for ideas. Lines and spots of paint have a very close correspondence with visual impressions, representing them as they produce them. They are much nearer to Nature as we see Nature than any vocabulary of words, which are classifications and generalizations. Words are abstract symbols many times removed from sense impressions. The painter in Pure Design is naturally interested in his impressions and is constantly considering them, comparing, discriminating and judging, and he is constantly discovering delightful effects of light and color in which there is more or less recognition of objects, people and things. He must be constantly looking out for these delightful effects and he must be putting them down in his note books. In that way he gets new and fresh motives for his practice of Pure Design. What he really cares

for in the impressions of sense, however, is not so much what he sees with his eyes as what he finds that expresses his idea:

> In faith, I do not love thee with mine eyes,
> For they in thee a thousand errors note;
> But 't is my heart that loves what they despise,
> . . . . . .
> . . . . . .
> . . . . . .
> . . . . . .
> . . . . . .
> . . . . . nor my five senses can
> Dissuade one foolish heart from serving thee.[1]

What Nature is, beyond the particulars and accidents of vision, we know not. We only guess. In this guessing we are very much aided by the ideas which have been expressed in Art by the masters. We see Nature in and through their ideas. What we see in Art we presently see in Nature: so Nature which is at first only a world of sense impressions becomes, as we grow older, a mirror in which we see a reflection of ourselves and our masters. This fact which we understand when we are speaking or writing, we do not understand so well when we are drawing and painting. There is nothing true, nothing good, nothing beautiful, but thinking makes it so. When we are drawing and painting from Nature we seem to be imitating what we see in Nature, but we are following, without knowing it, the motives and ideas of other men which have become our own, to what extent we never know. In imitating the impressions and accidents of vision, without *arrière pensée* or *parti pris*, we miss what Mr. Pater has described as "the apprehension of what is needed to carry the meaning."[2] To get that apprehension of what is needed to carry the meaning we turn to the masters of the Art. They and they alone can tell us what to do. In other words it is in the Art of others that we find our own Art.

[1] Shakespeare : *Sonnets*, CXLI.

[2] Walter Pater: *Appreciations, with an Essay on Style*, p. 31.

Has the designer no use, then, for Nature? Does he proceed regardless of sense impressions and visual experience? If he so proceeds, ignoring Nature, he makes a very great mistake. When we have been studying the Art of the Past and know it well, when we have discovered what is best in Art and then turn to Nature, we find there the most wonderful and astonishing things, but we discover these things always in the light of ideas and ideals. We know what to look for and we recognize it when we find it. We look not for sense impressions, not for the accidents of vision, but for our ideas and ideals and we find them, mixed up with many other things. We never see the same things in Nature, you and I. The reason is that you are looking for one thing and I am looking for another. What I am looking for is what I see.

Just as a musician may find his idea, his motive, in the cry of a boy and the sounds of a runaway horse and taking the motive may develop it in the forms of Counterpoint and Harmony, with repetitions and harmonies in rhythmical sequences: just as a dancer may find his motive in certain actions of daily life, work or play, and may develop this motive in the forms of Dancing: so the designer who draws and paints may find his motive, when he happens to see a lady with red hair and a black shawl taking a glass of lemonade with half a lemon in it. It does not follow that the lady comes into the motive at all. The lady may or may not be in it. She may be utterly ignored and the tones, measures and shapes may be reproduced in an effect in which no element of representation appears. The motive thus suggested and conceived may then be developed in all over repetitions, in linear sequences or progressions, or in rhythms, or in symmetrical or unsymmetrical balances. A single motive such as I have described may be combined with other motives similarly derived from Nature and the combination developed. The glass may be taken from the lady, the slice of lemon from the glass, and another motive may be discovered in the radial symmetry of the slice of lemon. The two motives may then be combined with one

another in a sequence of repetitions and alternations which in Music might be described as a fugue. In painting, it is a fugue or flight in tone and space-relations, and it may be quite as interesting and delightful to the eye as any that was ever composed for the ear by Handel or by Bach. In producing compositions in Pure Design the painter follows the law of his palette and the forms and modes of Design precisely as the musician follows the laws of the musical scale and its keys, and the rules of Counterpoint and of Harmony. Neither the musician nor the painter in Pure Design should be satisfied until he has achieved the particular kind of perfection which belongs to the art which he practices.

When Henschel was studying composition with Brahms, Brahms said to him: "That is a pretty song but it seems to me that you are too easily satisfied. One ought never to forget that by actually perfecting one piece one learns more than by beginning or half-finishing ten. Let it rest, let it rest, and keep going back to it and working at it, over and over again until it is completed, as a finished work of art, until there is not a note too much or too little, not a bar you could improve upon. Whether it is beautiful, also, is an entirely different matter, but perfect it must be . . . perfect and unassailable." [1] That is the idea of Music and it is the idea of Pure Design.

The very last thing for the painter who would be an artist to think of is originality. Originality means that the imagination takes a new course through the field of sense impressions and ideas, making a connection or association which has never been made before. As a rule these new connections and associations are neither interesting nor significant. It very rarely happens that the imagination proceeds in an unprecedented way and produces a new idea which is at all important in itself or in its consequences. It is quite possible to be original, therefore, without being impressive. The desire to be original is really a desire to be the medium of new and important communications. To propose this distinction for oneself is a pretty

[1] George Henschel: "Personal Recollections," *Century Magazine*, March, 1901.

sure way of missing it. New and important communications can never be anticipated. If they occur to us they occur when we are hard at work thinking and expressing ourselves; not when we are waiting for them and doing nothing.

In bringing this discussion of Pure Design to an end I must remind the reader that the practice of Pure Design is neither an amusement for the designer nor an entertainment for the public. It should be regarded, for the present at least, as an educational discipline which has as its end the development of the Love of Order and the Sense of Beauty; the Love of Order and the Sense of Beauty being prerequisites of good citizenship and far more important for most people than a Love of Knowledge which can never be gratified. Most of us leave school at the age of fifteen. If, when we leave school, we know the English Language well, and can speak it and write it correctly, if we understand Arithmetic, Algebra and Geometry, if we have a general knowledge of Geography and History, and have read a few good books, we have done very well in the matter of learning. We have had no opportunity, of course, to acquire the Love of Knowledge which means seeking it in its sources. If, however, we have acquired by a practice of Pure Art the Love of Order and the Sense of Beauty we are attracted by every kind of righteousness and have a keen interest in Nature and in works of Art. We have the satisfactions and enjoyments which are supposed to be a monopoly of the privileged few. At the same time, loving Order and Beauty we hate every kind of unrighteousness and every kind of disorder and confusion whether in thought or in deed. I call that a very good and sufficient education for most people. It is all that they can expect to get, when they must leave school at the age of fifteen. I reserve the Love of Knowledge for those who are able to devote their lives to it.

The idea which Plato had of an education is the right one. He says:[1] "The particular training which refers to pleasure and pain which leads us always to hate what we ought to

[1] Plato: *Laws*, II. Jowett, V, § 653, p. 222.

hate and to love what we ought to love is to be separated from all others and is rightly called education." A little further on he says:[1] "Shall we agree, then, that an education is first given by Apollo and the Muses? What do you say?"

[1] Plato: *Laws*, II, § 654. Jowett, V, p. 223.

ON REPRESENTATION

In beginning the practice of Drawing and Painting in Representation we should follow the suggestions of the imagination and draw, not from the objects of vision, but from the knowledge of objects, which, derived from visual impressions, is recollected in visual imagery. Having, for example, seen the human figure in its different attitudes and having seen it in artistic representations, we should be able to think of it in the terms of vision, in measures and shapes of light and color, and be able to put our thoughts of it into the corresponding terms of our art, — lines and spots of paint. Certainly in the beginning of it, our drawing and painting should be a kind of writing about the objects of vision, — a picture-writing. Painting was, at first, nothing but picture-writing and picture-writing was for a long time, as we know, the only writing there was. In the Far East, in China and Japan, the painters have never had any other idea of their art. A Japanese child said to me, looking at one of my paintings, "Did you write that?"

In Egypt and among the Greeks, painting was regarded as a kind of writing until the beginning of representation in forms of Perspective and of Chiaroscuro. That was in Greece some time in the fifth century before Christ. With the development of these comparatively realistic modes of representation the idea that painting was writing disappeared, but painting was still, for a long time, the expression of visual knowledge in the form of ideas rather than an imitation of objects as seen in effects of light. The great masters of the Middle Ages and the Renaissance composed their pictures, even their portraits, imaginatively. They turned to Nature only when they required some particular knowledge or information. It was with this idea that they made drawings from objects, — drawings of figures in different attitudes, of

heads, hands and feet, of draperies and other accessories. These drawings were made, in all cases, as a means of information, a means of getting together certain facts which were required for the satisfactory expression of certain ideas. The necessity of getting knowledge in this way, by drawing from Nature, was recognised in the School of Giotto. Cennino Cennini, writing at the end of the fourteenth century, tells us to remember that the most perfect guide we can have is drawing from Nature; "especially when we begin to have some judgment in design."[1] The painters of the Middle Ages and of the Renaissance, without exception so far as I know, drew their compositions according to suggestions of the imagination and then turned to Nature for the knowledge which they required to carry out and complete their ideas; expressing them in the terms of visual knowledge, which was a knowledge both of Nature and of Art. In portrait painting, the portrait, though painted from life, was never an imitation or copy of visual facts. There was a well understood way of painting the heads, the hands, the draperies and other objects represented, and they were painted in that way and in no other way. The painting was done according to the rules of the art, — rules well understood by all painters and followed as a matter of course. The tone-relations of a picture were predetermined by the tones of a set-palette and there were rules for using the palette. Cennini tells us how he had three tones of flesh-color in three small vases and a red color, also, with which he touched the lips and the cheeks. The evidence that set-palettes were used is seen in the recurrence of the same colors in the same values, not only in different parts of one picture but in different pictures of a master or a school. The tones were prepared before the painting was undertaken. Whether they were set out on a palette or kept in small vases is irrelevant. Painting was simply a distribution of certain prepared tones, in certain measures and in certain shapes, according to

[1] Christiana Herringham: *The Book of the Art of Cennino Cennini.* New York: Francis P. Harper, London: George Allen, 1899, p. 22.

the representation undertaken. This is true not only of the early masters but of the later masters as well. Titian, Tintoretto, Velasquez, Rubens, Rembrandt and Hals knew exactly how to paint a head before they sat down to paint one. They knew exactly what tones they were going to use before they used them. We know this because we see how the same tones are used again and again, and assume that they were either prepared beforehand or mixed on the palette as they were required; but in the same way, always, every tone according to a definite recipe or rule. It is particularly easy to pick out the tones of Rubens. He uses them so distinctly. In the case of Van Dyck, the distinctions which must have been clear on the palette disappear, as a rule, in the picture; but you can make them out in some cases, and the fact that they were distinct on the palette is seen in the repetition of the same tonality in one picture after another. You see the process in Rubens. You don't see the process so clearly in Van Dyck, but you infer the process from the recurrence of a certain tonality. In other words there was a way of doing everything and no one was regarded as a master who did not know the way. The great master was the man who followed the way successfully and produced the masterpiece.

In the beginning, even the problem of arrangement and composition was settled by precedents and rules. I remember the rule which was established at the end of the eighth century by the Second Council of Nice.[1] It reads as follows: "The composition of the figures is not the invention of the painter but the tradition and law of the Catholic Church. As Saint Basil says [middle of fourth century] this tradition, this law, is in the disposition and ordination of the fathers, not for the painter to decide. He has his art." It appears from this rule that the early painters, so far as they were painters of theological subjects, so far as they took their subjects from the Scriptures or from the Lives of the Saints, were very

[1] Christiana Herringham: *The Book of the Art of Cennino Cennini.* Introduction.

strictly limited to the technical part of the performance. There was a certain subject to be treated and the subject was to be treated in a certain way; so there was nothing for the painter to do but to paint. He had his art and that was it, painting. The problem of the painter was not, as in these days, what to do. That was all settled for him. His problem was how to do it. As time went on the painters turned from the Scriptures and the Lives of the Saints to the Mythology of the Greeks and to subjects of Ancient History. That was after the beginning of the Renaissance; but even then, when the painter was free to choose his subject and to invent his composition, he still followed good precedents, very closely. As Saint Basil said: "What excels in ancient things is to be venerated." Cennino Cennini, writing at the end of the fourteenth century, says: "You must follow the method of coloring which I shall point out to you because Giotto the great master followed it." The respect for "good precedents" was universal and they were followed as a matter of course, through the Middle Ages, through the period of the Renaissance and afterwards, — until now. Now, the painters are making a very strenuous effort to escape from "the musty grip of the past." They want to paint Life, but they want to paint it without Art, — the Art which means good precedents formulated in good rules. The painters have no longer any use for rules. They rejoice in a complete emancipation. I think, however, that it will not be long before they learn that the problems of painting cannot be solved in every instance of painting, that it is impossible to express oneself in any art regardless of precedents and rules, in which the experience of those who have lived and worked before us is summed up.

Painting to-day is very little more than a transcription of sense impressions and of the accidents of vision. A well-known painter tells me that his aim is to get exactly what he sees upon his canvas, and he must not think about it for fear that in thinking about it the blessed truth may be missed. According to this idea you must simply follow your impressions:

Light, Dark, Red, Orange, Yellow, Green, Blue, Violet; Up, Down, Right, Left, Straight, Round, Large, Small, and so on, inventing your terms of expression, your lines and spots of paint, one at a time, according to your feeling or instinct. It is very much like going out to walk and assigning a word to every object, hoping that the reader of your long list of words may be able to follow you in your walk. You put them down, just as they come, as they are suggested or inspired by the impressions of vision. The reader will see in the list of words just how it all happened. This is a new idea of Art. Some of the painters following this method or rather absence of method, tell us that composition is nonsense, that they have no use for it, nor any use for precedents or for any rules or principles which may be drawn from them. They are moved to act by what they see and proceed instinctively rather than intelligently. If they use their intelligence it is to deny its value; insisting upon the superior value of their instincts.

The fact is, however, that when the painter has done a certain thing in a certain way with a good result or effect he will do the same thing again in the same way when there is occasion. That is decidedly intelligent. When, as it often happens, he has done a certain thing in a certain way repeatedly, because he has learned by experience that it is a good thing to do, he does it instinctively without thinking about it. In that way he is intelligent without knowing it. So, after all, the modern painter, even the most thorough going impressionist, may be intelligent and even inspired up to a certain point. He may deny the value of intelligence but it is rather difficult to avoid using it and he seldom succeeds in painting instinctively without intelligence as he pretends. His procedure is, nevertheless, peculiar and unprecedented. He offers us a great deal of painting with comparatively little thought in it. There has never been so much painting with so little thinking before. The painter uses his intelligence only in view of alternatives, when they occur to him, when he decides to do this and not that. In view of these alternatives and his wilful

ignorance of the art of the past he decides what to do very strictly according to the precedents of his own practice. He follows his own practice as a dog follows his tail and he never gets very far. Native genius is expressed for all it is worth but it does not seem to be worth much. Our Art is not worth much when there is nothing in it but ourselves, when we are not informed and inspired by the ideas and ideals of other men and by the technical excellence and perfection which they have achieved.

Don't begin by drawing what you see, draw what you think, what you imagine. The result will be a lot of drawings in which your visual experience and knowledge is more or less satisfactorily expressed. These first ideas must be regarded as hypotheses. You cannot be sure that they are true because you have not had the specific experiences which they suggest. The imagination does not reproduce what you have seen as you have seen it. It creates new arrangements and combinations, new compositions and effects. The question is whether the idea which the imagination has suggested, which is expressed in your drawing, is a true idea or not. Strictly speaking it is an hypothesis to be verified. Proceeding from the idea you look for the specific experience which it implies or suggests. You go to Nature. You get a model. You arrange the model according to your idea, so far as possible, and you get in that way the specific experience you want. You get it only approximately, of course. When you have had the specific experience which is suggested by your first idea and hypothesis you have a knowledge of the subject which you did not have before. You have verified your idea or you have disproved it as the case may be. The result is, in most cases, another idea which is a repetition of the first with variations or modifications in the direction of the Truth. With this second idea you begin again. Turning in this way from the idea to the corresponding thing in Nature you get at last all the facts, all the knowledge, which your first idea suggested and required for its expression. That is what I mean when I say that the

painter must apprehend and know what is needed to express his idea. What he wants is visual experience and visual knowledge so far as his ideas are concerned or the subjects in which he is interested. Every subject of interest is a subject for investigation. A careful and accurate record of every specific experience or experiment should be made by drawing and painting from Nature, but the object of this imitative and statistical work is to get information. Just as we take notes in terms of language about things we are studying in Nature, just as we take notes of our reading, if the facts we want lie in books, so, being painters, we make drawings and studies from Nature constantly, but we do not offer these studies as works of Art, any more than we publish the notes and memoranda we may have made in writing.

We start with casual observations. Then the imagination suggests an idea which is our point of departure. We go to Nature to discover whether the idea is true or not. We seek the experiences which it implies or suggests. The imagination then formulates another idea. Again we go to Nature, seeking the facts which will verify or modify the idea and develop it in the direction of consistency and truth. In that way we proceed from idea to idea until at last we reach an idea comprehending all essential facts and representing all that we know or all that we can learn by the study of Nature. This ultimate idea is what we offer to the public if we offer anything. In its substance it represents Science; in its form it represents Art. "*L'idée formulée par les faits représente la Science.*" That is the definition of Science which I find in a book of Claude Bernard, the famous French physician.[1] *Les faits formulés par une idée représentent l'Art* would be my definition of Art, if I may express myself in French. The truth of the idea is universal but the form of the idea, being imaginative, is personal. *La Science: c'est nous; L'Art: c'est moi.*

[1] M. Claude Bernard: *Introduction à l'Étude de la Médecine Expérimentale.* Paris, 1865, pp. 47 and 75. This book is one of the best treatises we have on the Scientific Method.

What I object to in impressionist painting is that it gives us the statistics of vision when we expect an idea. The impressionist painter never gives us an idea because he will not follow his imagination, which is the idea-producing faculty. If he follows his imagination he does so unintentionally. He does not believe in the imagination and does not trust it. So he gives us statistics instead of ideas. To find true and self-consistent ideas which stand at once for scientific knowledge and for the art of painting, we must turn from the practice of modern schools to the practice of the great masters of the past. It is they who give us knowledge in the substance of the thought and consistency, in its form. The great masters of the Far East, of China and Japan, the great masters of the Italian schools and of the Renaissance, which spread from Italy all over Europe, produced their works in a method at once scientific and artistic.

Why is it that the modern painter is unable to do what so many painters did in earlier times? Has some human faculty been lost? Being lost, is it beyond recovery? No human faculty has been lost, I am sure. The principle of following the imagination and achieving a true idea by the method of imaginative hypothesis with verification in specific experience is perfectly well understood in all scientific work. It is the method which is followed by scientific men everywhere, and it can be followed just as well by artists if they are willing to become scientific in their methods. The object of painting in Representation being to achieve a true idea, there is only one way of achieving it which is at once scientific and artistic. It is rather curious, when we think of it, that the method of Modern Science was followed by the painters of the Renaissance, as a matter of course, and now the painters not only refuse to follow it but deny its value. I am sure that we are as able to follow the lead of the imagination as ever: only we do not do it and because we do not do it we cannot do it. We have no practice, therefore no ability. We have only to try it and trust it, to discover that the Imagination, the

idea-producing faculty is still available for the purposes of painting.

There were no art schools, no schools of drawing and painting, during the Middle Ages and the Renaissance. The painter was first an apprentice and he learned the rules of the art by observing and following the practice and example of his master. Nowadays, however, the masters have no apprentices. If you want to learn to draw and to paint you go to a school of drawing and painting. There you draw from casts, then from life, then paint from life. The practice is strictly imitative and the standards are those of imitation and of a particular and statistical imitation. There is no discrimination in materials or in palettes, no discrimination in points of view or in methods of work. The rules and principles of the Art as practiced by the masters are ignored or despised. Draw what you see, paint what you see. That is what you have to do and that is all that you learn to do. When you leave the school that is all you know how to do. It is simply a question whether you can do that well or not. The profession of drawing and painting means, according to the practice of the schools, a very close imitation of objects, people and things, so far as they can be reduced to the condition of still life for the purpose, and the question of art is simply whether this particular thing to do, this imitation of still life, is well and cleverly done or not. In other words the art of it lies, as all art lies, in excellence, but the excellence is in a type of work in which the imagination plays no part and thinking is reduced to a minimum.

It is worth while to remember that there was nothing which the great masters of the Renaissance could think of as visible which they could not paint. They were not at all tied down to still life and particular effects of light. Understanding Nature in her laws and principles they seldom, if ever, condescended to imitate anything. They followed the lead of the imagination and by constantly referring to Nature painted, not what they could see, at a particular moment, in a particular place, in

a particular light, but their ideas, which they proceeded to realize and express in matter of fact terms. They give us, therefore, not facts but facts in ideas and there is no literal correspondence between the creations of art and the particulars of experience. This cannot be done, of course, without a scientific study of Nature on the one hand and obedience to the imagination on the other.

There are painters and a good many of them who deny the value of the school training, who do not believe in it, who are trying, they tell us, to follow the suggestions of the imagination. They are doing this, however, without any knowledge of the art as practiced by its masters. The painters who follow the imagination are as a rule as ignorant of the practice of the masters and the principles and rules of the art as those who follow the practice of imitation, as it is taught in the schools. Like the school-trained painters, these independents, and for the most part "refusés," have no use for precedents, principles or rules, but rejoice in standing alone, each one depending entirely upon himself, expressing himself in his own particular and peculiar way and producing new and unprecedented types of "Art." They are doing what the old masters did in following the imagination, but they are doing this without any of the help which the old masters had in a tradition of technical knowledge and understandings in which the experience of generations of painters was embodied. These would-be imaginative painters of our time refuse to be tied down to models and to still life. They agree with the old masters that there is nothing which can be seen under any circumstances, even for an instant, nothing which might possibly be seen though it has never been seen, nothing, indeed, which can be imagined in the terms of vision, whether seen or unseen, which cannot be painted. With this vision of possibilities they proceed to express themselves by painting: but it does not occur to them that any knowledge is necessary for the expression of ideas. They expect the imagination to suggest not only the ideas but all the knowledge which is

required for their expression. They don't understand that the imagination has to be constantly supplied with knowledge or it will not work. There is no such thing as thinking without knowledge.

At the bottom of it all lies the assumption of original genius and infallibility. These "born artists" assume that what they imagine must be true because they have imagined it. They have no occasion, therefore, to turn to Nature. They have no need of specific experience to verify their ideas. Their ideas require no verification. Being their ideas they must be all right, and they are not only true but beautiful. It is the exclusive privilege of genius to produce what is true and beautiful quite spontaneously. These born artists, as they think themselves, refuse to study Design or to practice it in any systematic way. They regard themselves as born designers. All they have to do is to follow their instincts and Order and Beauty come to pass as the inevitable expression of the artistic temperament with which they are so singularly endowed.

In Design as in Representation we think in the terms of knowledge. In Representation it is the knowledge of objects represented. In Design it is in a knowledge of the principles of Order and of the precedents which illustrate them. To be a good designer you must have studied good designs and had practice, lots of practice, in the different modes of Design. It is all very well when you have thought it out, your idea, and got it into a definite form, to get excited. When you have something definite to express you can proceed with emotion, and if the emotion is appropriate to the occasion the result may be good; but it is a profound mistake to get emotionally aroused before you have anything definite to express. Under such circumstances you express emotion, perhaps, but there is nothing in it and the effect is ridiculous.

The efforts of these self-sufficient "artists" are a warning for us. Ignoring the art of the past, its ideals, and its technical standards, they proceed like little children, without knowledge

and without training, and they express the states of mind which they happen to be in, no matter what they are. The result is, of course, the expression of ignorance. Having no understanding of materials or methods and no technical training, the performance is as crude as it is empty. The world has never had a more striking lesson; because these would-be artless little children are grown up people living in the principal capitals of Europe and exhibiting their lack of knowledge and their incompetence before the whole world. Ignorance and incompetence have hitherto been relegated to obscurity, but they are now exposed as never before.

The Post-Impressionist tells us that he proceeds to express himself regardless of influences, precedents, examples and traditions. His aim is to exhibit himself. What he exhibits is a state of mind, unaffected by other minds. The individual human soul is at last and for the first time in History fully revealed: but what is it that is revealed? The individual human soul stands naked and exposed to view as never before. There is something shameless and unblushing about it. It is a shocking spectacle; but when we hasten to draw the curtain or put out the lights there is a crowd of believers and admirers who insist upon seeing all that is to be seen, rejoicing in what they call a new revelation in Art, which it certainly is. I see in it all something "savage, extreme, rude, cruel, not to trust." A good friend of mine reminded me of this line of Shakespeare.[1] It fits the case perfectly. The Post-Impressionists believe in nothing but themselves and there are writers just like them who tell us that they want to write "not Literature but Life." It was in view of this declaration that somebody said: "Life is worth living, of course, but it is no longer worth reading." Nor are the pictures of the Post-Impressionists, Futurists and others of the same brutality, worth looking at. No one who remembers what the Art of Painting has been, who knows its masterpieces, will stop for a moment to look at what stands neither for Truth

[1] *Sonnets*, CXXIX.

nor for Beauty. Seeing the pictures of the Post-Impressionists in the Salon d'Automne, I have wondered whether a loss of the sense of humor might not be also loss of mind. They tell me that I shall admire the "New Art" when I understand it. That is possible. I may be mistaken of course but the admirer is as often mistaken as the critic. It is a more amiable part that he plays but equally dangerous.

MODES OF REPRESENTATION

I SHALL now describe the different modes of Drawing and Painting in Representation: the different modes in which we express ourselves, whether we follow the visual imagination or visual impressions.

I. DRAWING IN LINES AND OUTLINES

The first mode of Drawing is the mode of Lines and Outlines. It is the simplest mode of the Art and the one which should be first understood and practiced. In beginning to draw the human figure or any other subject in which I am interested I must draw it first as I imagine it, to express my idea. Then I draw my subject from Nature, so far as I can, to make sure that the idea which I have expressed is a true idea. If it is not true, the specific experience I have had in drawing the subject from Nature will give me another idea which ought to be a better one, with more knowledge in it and more truth.

Among the sayings of William M. Hunt is this: "I believe that the best paintings of landscape are made from memory. Of course you must study Nature carefully for certain details, but for the *picture*, paint it indoors, from memory. I never saw Millet out with an umbrella. When before Nature you are so occupied with representing what you see, that you can't study combination and composition, you can't make a *picture*." In another passage he says: "See what makes the picture not what makes the thing!" Again he says: "Do things from memory because in that way you remember only the picture."[1] Corot used to say that he did not paint what he saw: he painted his dreams. Turner was constantly going about, travelling everywhere, making drawings and sketches,

[1] *Talks about Art.* London, 1878, p. 82 *et seq.*

mostly in lines and outlines; getting in that way the knowledge which he afterwards put into his pictures which were imaginatively composed in the studio.

As an illustration I will assume an interest in Athletic Sports, an interest I am not supposed to have. I am interested, let us say, in Wrestling. I love to see the human body in vigorous action. Attending wrestling bouts when I can, I am constantly watching for the best moment, a moment of consistency, unity, order and beauty. That is my particular interest. I have no interest in "holds" nor do I care who wins. I am interested only in what I see and not in everything that I see, only in certain moments of vision when I see just what I want, — my idea. Thinking of that, getting glimpses of it from time to time, I begin to draw. Following the suggestion of the visual imagination I draw out the idea that I want to express, if I can. I see in my drawing the two figures struggling together. I see in it a certain truth. I see in it something of the consistency, unity, order and beauty I have looked for, that I want to express. Then I take a piece of tracing-paper and put it over the drawing and fixing my attention closely upon the lines of it I try to imagine better lines, lines which will be more true in character, better connected and more expressive in every way. I make another drawing over the first. In this second drawing I have presumably expressed all that I know of my subject. If I am perfectly satisfied that my drawing is a good drawing and expresses my idea I let it go. The idea is expressed and there is nothing more to be done. The chances are, however, that I am not satisfied with my idea, as I have expressed it. In that case I must go to Nature and get the particular experience I need, as nearly as I can. I must find some experts in wrestling; not professional models who know nothing about wrestling who can only take the attitudes they are in the habit of taking in the life classes. What I want, if I can get it, is the sight of two wrestlers in a pose as nearly as possible the pose of my drawing, which is my idea. I am looking for the particular

experience suggested in my drawing, for the particular facts and information which I need to make a better drawing which will express the idea more satisfactorily. I must not think of drawing any other pose of the figures. I want to be sure that the figures I have drawn and the attitudes in which I have drawn them are correctly drawn. I want to be sure that my idea is a true idea. If I get my models together and see something I like better than what I have drawn I may take note of it. It has given me another idea which I may take up later. What I am after at this time is the experience, the facts, the information which I require to do what I have already done better than I have done it; much better if possible. As the pose of the figures is probably one which cannot be held except for a few seconds or a very few minutes, I must draw quickly, very quickly. If I cannot draw fast enough to get the facts I want I must take my camera and take a photograph. There is nothing else to do. I am not going to substitute the photograph for my idea. I am going to study the photograph for the facts which I am unable to draw. If I draw from the photograph it is simply to get those facts into my mind, the facts that belong to my idea. If I draw the facts as I find them in the photograph and draw them over and over again I shall get them very clearly in mind; but I must draw only the facts that belong to my idea, nothing else. It is, of course, better to draw from Nature than to draw from a photograph. It is much more interesting and exciting. I draw from Nature when I can. I draw from the photograph only what I cannot draw from Nature.

I am constantly taking photographs and collecting those taken by other people. I have in my collection of photographs what the writer has in a collection of books on subjects in which he is interested. My photographs are my books of reference. Assuming an interest in wrestling I ought to have a lot of photographs of the subject. I ought to take them myself, because when I take them myself I get more nearly the particular facts and information I want.

I am not going to give up my idea of wrestling because the pose is one which is impossible to hold for any length of time. I am not going to be limited to subjects of still life. If my subject comes and goes quickly and never comes again, I cannot draw it and I cannot get the facts I want to study and think about except by instantaneous photography. I must use photographs. I draw from the photographs only the facts which belong to my idea leaving out everything else. Then I paint my picture and express my idea.

In this study of wrestling and in my effort to draw a certain particular moment of wrestling I am naturally interested in the drawings of some of the old masters. I am particularly interested in some of the drawings of Antonio Pollajuolo, who more than any other master was interested in the human body in vigorous action. There is a drawing of Hercules in the British Museum which I am thinking of. There are drawings also of Leonardo and of Michelangelo which are suggestive to me. Studying these drawings I get a standard of drawing and learn how to express myself. To get this standard distinctly in mind I copy the drawings. In making these copies I am studying not only the forms of expression but the ideas of great masters, and I find them very stimulating and inspiring. I study the drawings of the masters, of subjects that interest me, just as, being a writer, I read the best books on my subject. I must draw constantly from Nature, and from photographs when I cannot draw from Nature, and I must draw constantly from the drawings of the masters. Having in this way informed my imagination as fully as possible, I follow it and make another drawing of my subject which ought to be more true in character and much better in design, as a form of expression. It ought to be better executed also, as I have had such a lot of practice in drawing from Nature and from works of art. It is very easy to draw well when we know exactly what we are going to draw; when the imagination is perfectly clear and definite in its suggestions, and we have no occasion to hesitate or to change our

minds. The drawing of "The Wrestlers" which I produce after my long study of the subject, drawing from Nature, from photographs and from works of art, is likely to be a great improvement upon the first drawing of the subject which I made when I had the subject very vaguely in mind. The drawing which I now make expresses presumably the truth of my idea and expresses it in good form. If I am satisfied that this is the case, I offer the drawing as a measure of my ability as a student, a thinker and an artist. The idea, so far as it is a true idea, belongs to Science. The form of the idea, the consistency of it, the unity of it, the order and beauty of it, belongs to Art.

Drawing from the Imagination

In drawing from the imagination I draw not what I see but what I imagine as visible. When I imagine nothing as visible I draw nothing. What I imagine is, of course, what I have seen, but I do not recollect what I have seen as I have seen it, necessarily. The visual imagination acts in the terms of vision, but it proceeds from term to term in its own way. Having received the impressions a, b, c, not only in this order but in the six other orders which are possible to these varieties, the visual imagination suggests these impressions in any order it prefers. In view of the infinite number and variety of our impressions we can never anticipate what the particular order and connection will be which the visual imagination will suggest. That is the reason why we must get our attention concentrated on one subject and on one particular aspect of the subject. In that way we control the activity of the imagination and direct its course. Thinking of one subject and of a particular aspect of the subject we expect the imagination to suggest only the terms of vision which are appropriate and suitable.

When I begin to draw from the imagination I must see what I am going to draw before I draw it. I visualize my subject and draw it as I see it. I do with the point of the pencil exactly what

my eye does. If the eye moves up, up goes the pencil. If the eye moves down, the pencil goes down. If the eye moves in any direction, to any distance, the pencil takes the same direction and stops when the eye stops. The result is a tracing of what I visually imagine. The results of drawing in this way may not, at first, be satisfactory. They may be very unsatisfactory. The visual images may not be at all clear or distinct. I may not have visual knowledge enough of the subject to visualize it properly and it will only be after a good deal of practice that I shall be able to follow the eye in this way.

In drawing from the imagination I find it suggestive and helpful to look away from my paper into space and try to see what I am drawing as if it were there before me. I then follow the contours of this ghost of reality with the eye and I draw them at the same time, almost without looking at my paper, only glancing at it from time to time. I may take my pencil and move it in the air along the contour of the figure which I imagine as visible. Then, if I do the same thing on my paper that I have done in the air, I draw what I have imagined. I may be able to ignore my paper and changing the focus of vision look through the paper and beyond it and see there what I have to draw. In that case I trace the contours on the paper as if it were transparent glass and I were looking through it at my subject and tracing upon it what I see through it.

With no visual knowledge of anything, I cannot draw in this way from the visual imagination. We are most of us in the habit when we see any object of giving it a word which is its name. This word suggests other words and we begin to talk or to write. We say all that we can think of in words or we write it down. Thinking about objects in the terms of language we are unable to draw anything. Our knowledge is too abstract, too general. Our eyes are open, but their sense is shut. It is only when we think of objects in the very specific terms of vision, in certain definite tones, measures and shapes, in certain lines or spots, that we have anything in mind that

can be drawn. As a rule it is only those who are in the habit of drawing who think in the terms of vision and it is because they think in these terms that they are able to draw. The terms of vision are the tones, the measures, the shapes, the lines and the spots of objects. Drawing from the visual imagination is all right, when the visual imagination is informed; when it is uninformed it is impossible to draw anything. We may talk about things, perhaps, but we cannot draw them.

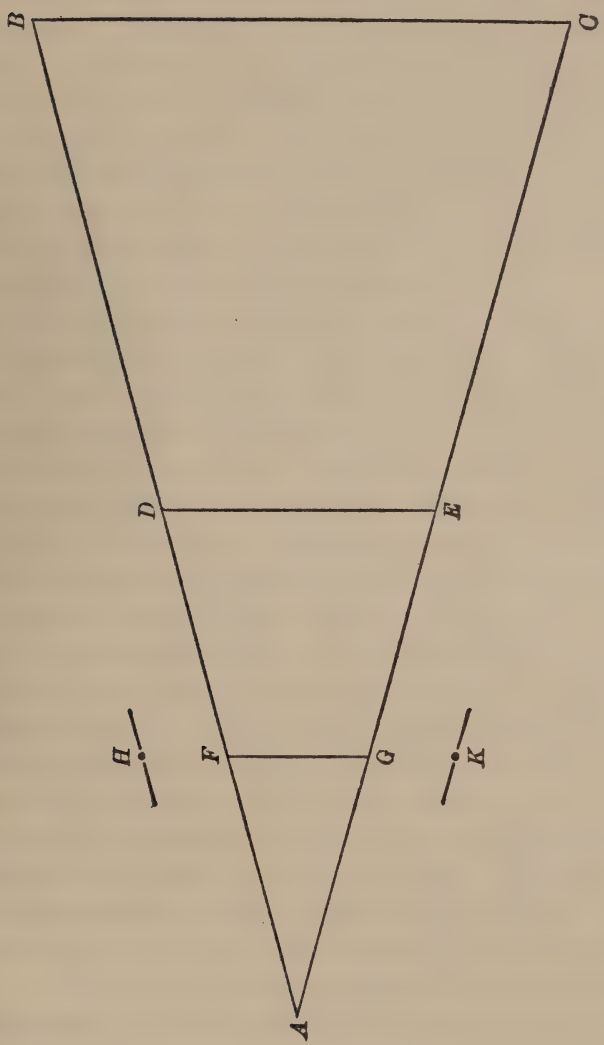
Drawing from Nature

In drawing from Nature I follow the eye exactly as I follow it when I draw from my visual imagination. My eye is fixed on the object. The point of the pencil is fixed on the surface of the paper. I imagine, however, that the point of the pencil is just where my eye is. Then as my eye moves up or down or right or left or straight or round, the point of my pencil moves over the paper and I draw what I see, exactly as I see it. The eye moves on the object and the pencil moves on the paper. They move together *pari passu*. My attention must be fixed intently upon the model. My eye must be in visual contact with the object, touching it so to speak, and my pencil, though it is on my paper, must be imaginatively just where my eye is. Drawing in this way, the scale of my drawing will be the scale of the object as seen in the plane of the drawing, neither larger nor smaller. A diagram will explain the idea better than it can be explained in words (page 127).

The eye is at A. The top and bottom of the object to be drawn are at B and C, respectively. If the object and the plane of the drawing are both at BC, the object is drawn full-size. If the plane of the drawing is at DE, halfway between the eye and the object, the object is drawn half-size. If the plane of the drawing is at FG, an eighth of the distance from the eye to the object, it is drawn in one-eighth size. We assume that the size of the object as we see it amounts to nothing at the point of vision, that from the point of vision it increases in size until the full size is reached when the object

is reached. In order to draw the object as we see it we must draw it at some particular point in the diverging angle of vision which starts at the eye and ends in the contours of the object. The scale of the drawing depends upon the position of the drawing in that angle. That is what I mean when I say that the object must be drawn in the scale in which it is seen in the plane of the drawing. If the object is between D and E in the diagram and the plane of the drawing is between B and C, the drawing will be twice the size of the object. To draw any object larger than it comes in the plane of the drawing the drawing should be beyond the object.

An object to be well seen as a whole and in all its parts should be seen, the whole of it, within a visual angle of thirty degrees, as in the Diagram. That means that a man standing six feet high to be properly seen should be standing at a distance of at least twelve feet. To draw the figure so placed in full size, that is six feet high, it will be necessary to put your drawing board or canvas alongside of the model. Then in order to see the model satisfactorily it will be necessary to go back to a distance of twelve feet. In that position, at that distance, it will be impossible, of course, to reach your drawing board to draw upon it. It will be necessary to study the figure from one standpoint and to draw it from another. It is not very difficult to do that. It is very easy. I have seen Mr. John S. Sargent and other painters do it and I have done it myself, very often. Looking at the model from the proper distance, where it is well seen, move your stick of charcoal or your brush, whatever you draw with, over the measures and shapes you wish to draw, then over the drawing board or canvas, which is presumably to the right of the model and at the same distance from the eye. Then go up to the drawing board or canvas and, without looking at the model, do what you have made up your mind to do. Draw on the canvas the lines you drew in the air, first over the model and then over the canvas. Having drawn what you intended to draw, go back to the place of observation and


B
C
D
E
H
F
G
K
A

compare the measures and shapes of the model with those of your drawing, to see whether they correspond as they should. The comparison is easily made and you see at once what is right and what is wrong in your drawing. Return to the drawing. Leave unchanged what is right and correct what is wrong. It is not half as inconvenient and awkward to proceed in this way as the reader may think. Whether easy or difficult, however, it is the only way to draw a full-sized portrait from life and to get any visual feeling into it. If you have your canvas alongside of you when your model is at a distance, you cannot produce a full-size drawing unless you construct it by calculations and measurements. Then your drawing will be mechanical and inexpressive.

It is only when you want to make a full-size drawing of a large object; it is only when you want to draw a life-size portrait; that you follow this method of seeing from one standpoint and drawing from another. As a rule you have your drawing board in your hand or within reach on an easel and you draw the object in the size that it comes in the plane of the drawing, the object being so placed as to be visible, all of it, within a visual angle of thirty degrees. In that way you draw what you see as you see it, very conveniently. The drawing may be small in scale but nobody will think whether it is small or large. The frame of the drawing will be just like a window, through which you see objects, people and things, without thinking at all whether they are large or small. They are larger when they are near, and smaller when they are distant, as they should be. The problem of perspective is thus solved without thinking about it.

The object you draw should be seen within a visual angle of thirty degrees and should be placed at a certain distance in order that you may see it in its proper proportions. The near and more distant parts should be seen in the same plane, so to speak, that is to say if the object is solid. If you draw a solid object as you see it when you are close up to it you are very sure to miss its proportions, that is to say the relation

of its measures to one another. The near parts will be too large in scale, the more distant parts too small. If you are too near the object you may miss seeing it as a whole, which is important. You look at one point and then at another, changing the direction of vision, up or down or to the right or the left. If you are too near you miss, also, seeing the contour clearly and satisfactorily. You see two contours, one with one eye and one with the other, and you do not know which one you are drawing, unless you shut one eye and look with the other, which is a habit to be avoided.

When you are drawing people draw them as you naturally see them, their heads being on a level with yours. Paint standing if your model is standing, sit down if your model is seated, or if you wish to stand up put the model on a model-stand. If you draw people looking down upon them or up at them, your drawings may not explain themselves as they should. The practice of the schools having the model standing on a model stand when the draughtsman is standing on the floor is a mistake, if the drawing is to be understood. We rarely see people standing above us in that way. As the pupils in the schools are drawing not for visual knowledge but for the sake of learning to draw, it makes little or no difference what model they have or where he stands or in what attitude. If however our object is to study people as we see them, we must be very careful about the position of the model and our own position. In the case of "The Wrestlers" I ought to draw them from the spectator's point of view. The spectator is standing, probably, and he is looking at the two men struggling on the ground. He is standing about fifteen feet away. That is where he can see best. To represent these facts the top of the drawing should be in a line with the eye of the draughtsman. That means leaving a space above the group of wrestlers to explain their connection with the observer.

Pictures for exhibition should be hung with this idea in mind. Full length portraits should stand on the floor or al-

most on the floor. Half lengths and seated figures may be put on the line, and no picture should be hung above the line, unless the subject is one we look up to see. Full length portraits are ridiculous when hung on the line or above it. Pictures have been used, so much, as wall decorations that we think of them as such. Hanging pictures does not mean showing pictures. It means making a handsome exhibit which will impress everyone coming into the room or gallery. All pictures are painted to be seen and should be exhibited so as to be seen properly, no matter whether the room looks well or not. When we go into a picture gallery it should be to look at the pictures, one at a time, not to look at the room. The art of hanging pictures is the art of placing them where they can be best seen and studied, one at a time. They should not be crowded together. There is always room enough for the good ones if the bad ones are left out, as they should be.

Coming back to the problem of Drawing, it is not necessary to have your drawing board set up vertically alongside of the subject, on your easel. It is often more convenient to hold it in your hand below the direction in which you look to see your model, but the paper should lie at right angles with the direction of vision when you are looking at it. If it lies obliquely, the drawing on the more distant parts of the paper will be larger in scale than the drawing on the nearer parts and you will miss your proportions. These various adjustments establishing the proper relation between the draughtsman and his model or subject should be made with great care and accuracy, until it is all well understood and a matter of course.

It is evident that Leonardo da Vinci had this idea of drawing which I have described, — the idea of following the eye with the pencil and drawing in tracing size. He says that the size of the figure when drawn should denote the distance at which it is situated. "If a figure be seen of the natural size, that means that it is near the eye." Then he goes on to say that the first figure in the picture will be " less than Nature in proportion as it recedes from the front of the picture or bottom

line." Further on he tells us "how to draw a particular spot accurately."[1] "Take a glass, as large as your paper, fasten it well between your eye and the object you mean to draw: fix your head in a frame (in such a manner as not to be able to move it) at the distance of two feet from the glass: shut one eye and draw with a pencil upon the glass all that you see through it and do this accurately. After that, trace upon paper what you have drawn on the glass, which tracing you may paint at pleasure, observing the aerial perspective." That is the idea which should be followed in Drawing.

Drawing in this way, looking at the object attentively and following the eye with your pencil, you draw correctly with very little difficulty. It is the natural way of drawing. Nobody would think of drawing in any other way, — we should all be drawing in that way, as a matter of course, — were it not for the practice which has been introduced and is now established in the schools of Drawing and Painting. The rule of these Schools is that all drawings must be made of one size regardless of the distance between the eye of draughtsman and the model and the distance between the eye of draughtsman and his drawing board. The size of the drawings is determined in all cases by the size of the sheets of paper which are regularly used and required and the drawings must be made as large as possible on these sheets of paper. It follows that only those who stand or sit quite close to the model can possibly follow the eye when drawing. The relation of the draughtsman to his drawing and to the model which is established by the rule of the Schools, above described, is illustrated in the diagram on page 127. The model being posed between the points B and C; if you make your drawing between the points F and G, you make it properly: the eye and the pencil can move together: but if you make your drawing between the points H and K, following the rule of the Schools, the eye and the pencil cannot move together. The pencil has to draw the figure larger than it is

[1] Leonardo da Vinci: *Treatise on Painting.* Chapter on "Linear Perspective."

seen in the plane of the drawing. It has to draw a figure which is seen in a more distant plane (a plane beyond D and E) and should be drawn only in that plane. It is not surprising that the student, being obliged to draw the model larger than he sees it in the plane of his drawing, learns to draw very slowly, if he learns to draw at all. He fails again and again; until he resorts at last to various means and methods of measurement. He holds up a plumb line or instead of it his pencil, holding it as nearly vertical as possible. He then observes what points are under and over one another. He holds up his pencil horizontally, if he can, and gets the connections of horizontality, right and left. Then he takes measures with his pencil and sees how many times the width of the nose goes into the space between the nose and the ear; or how many times the horizontal measure between the eyes goes into the vertical measure between the eyes and the chin; or how many heads go into the whole or into different parts of the figure. Of course these methods of measurement are very inaccurate and unsatisfactory and an approximation is all that can be hoped for. It is not surprising that it takes years to learn to draw in this way, it is so very difficult. Very few persons ever learn to draw well, following this method of the Schools.

Nobody can remember very well what parts fall into the verticals of the plumb line, what parts fall into horizontal lines or how many times the nose goes into the cheek or the eyes into the mouth or the head into the figure. Assuming that these observations are quite correct, which they seldom are, they produce no visual impressions or visual imagery. The student in the academic schools draws from one model, in one pose, for a whole week, four hours a day. If at the end of the week he is asked to visualize the figure he has been drawing and to draw it from his imagination he finds that he cannot do it. He may be able to remember some of his calculations and measurements, but if he remembers the sizes he does not perhaps remember the shapes, or remembering the shapes he has forgotten their sizes. If he gets any result at all

it is a very inaccurate one and very inexpressive. If he remembers anything it will be his own drawing, having been over the shapes of it in the measures of it so many times; his drawing, however, is seldom worth remembering.

The men who make the best drawings in the schools are the men who sit or stand close to the model, who are for that reason able to make drawings of the regulation size and at the same time in tracing size. These men do not know why they make better drawings when near the model, but they do, so they get as near to the model as possible, ignoring the distortions of perspective which are inevitable. Their drawings are at least true to one point of view and to one eye and they are expressive and interesting. The drawings of the other men, made by the inaccurate methods of measurement I have described are comparatively worthless. If they are correct they are mechanically correct, not expressively correct. They express no visual feeling.

When the student leaves the school he draws as he pleases. If he has any feeling at all for what he draws, he instinctively begins to draw in the natural way which is the right way. He begins to follow his eye. The point of his pencil is imaginatively just where his eye is and as he moves his eye he moves his pencil. He is surprised to find what a good and able draughtsman he is. It is so easy to draw. He wonders why he had so much difficulty when he was drawing in the school. It is exciting and delightful to draw. It was so stupid in the school. The drawings are expressive and interesting as never before. Nobody knows why they are so interesting, but the question is dismissed with a single phrase: he is a born draughtsman and everything he does is interesting. Another man, coming out of the school, who has no feeling for what he draws, who is a creature not of feeling but of habit, puts up his easel and his canvas just as he did in the school and putting his model off at a distance proceeds to draw a life-size portrait. It does not occur to him to put his canvas alongside of his sitter and to walk up to it when he wants to paint upon

it. Nobody has taught him to do that so he does not do it. He goes on doing just what he did in the school. The rule of the school is to fill the space of the paper or canvas and to get the proportions: then to go ahead, drawing in the details of the modelling to produce the effect of light and shade. The teacher allows his pupils to go on for years trying to draw in this impossible way. The teachers who many of them draw in the right way themselves don't know the difference between the right way and the wrong way and cannot explain it. So the pupils are left to get on as best they can, and they are prevented from drawing in the right way by the rule that the drawing must in every case be as large as possible on the paper and the paper must be of one size and one shape always. No one who wants to learn to draw should go near any of the Art Schools. They are blind alleys that lead nowhere.

The student who has acquired the habit of drawing with the idea of "filling the space properly" (that is the phrase) never draws either correctly or expressively. There is only one scale for every drawing we make from Nature. It is determined by the lines which diverging from the eye terminate in the contours of the object which is being drawn and by the distance of the drawing from the eye.

All the drawings we have of the masters of drawing, with very few if any exceptions, were produced according to this rule. Looking over the great collections of drawings, — the collection of the Uffizi in Florence, of the Albertina in Vienna, of the Louvre in Paris and others, — it is very easy to see that the great masters of drawing followed either the eye or the visual imagination and had no occasion to resort to measurements or other mechanical aids. They drew either what they saw, as they saw it, or what they imagined as visible, as they imagined it. Consider the drawings of Botticelli, of Filippino Lippi, of Verrocchio and Lorenzo di Credi; of Pollajuolo and Mantegna, of Leonardo, of Andrea del Sarto, of Raphael and Michelangelo; of Pontormo and Tiepolo; of Dürer, Holbein and Rembrandt; of Rubens, Watteau and

Turner. Among the modern men to be thought of is Ingres followed by Degas. Think of the wonderful drawings they have produced! There are wonderful drawings by Whistler, also, and I greatly admire the drawings by Rodin I have seen. I find very interesting drawings in some of the French and German papers, particularly in Simplicissimus.

The drawing of the masters is seen not only in their drawings but in their pictures. Some of the masters have left no drawings, or very few. The drawing of Piero della Francesca, for example, is best seen in his pictures; in the two large pictures in the National Gallery, for instance; in the two well-known portraits in the Uffizi and in the paintings at Arezzo and at Borgo San Sepolcro.

I have not spoken of the wonderful drawings of the Chinese and Japanese masters or of the drawing to be seen in their pictures. I shall have occasion to speak more particularly of Chinese and Japanese drawing further on.

In these drawings by the masters of Drawing, I find, first of all, that they drew what interested them in connection with pictures they were going to paint. I see in their drawings what particularly interested them. Then I see that they followed the eye in drawing from Nature, the imagination in drawing from the imagination. I know this for two reasons. The drawings are not as a rule large in scale but rather small. Knowing the size of the objects represented I observe that they were drawn as large as possible, the objects being at a distance where they could be well seen as a whole and in their parts. The draughtsman takes his position instinctively where he can see what he has to draw most satisfactorily. Then the lines have that quality and expressiveness which mean pure visual feeling. The drawings which have that expressiveness were produced by following the eye or the visual imagination and in no other way.

Looking over the drawings of the masters and selecting the best, we ought to study some of them visually, by reproducing them. In copying drawings, or in drawing from photo-

graphs of them, if the originals are inaccessible, the drawing or the photograph should be set alongside of the paper upon which the reproduction is to be made. The drawing should then be made, following the eye. As the eye moves the hand should move. Copying in this way you really see what you are drawing and draw what you see.

I find the following statement in Giles's Introduction to the History of Pictorial Art in China:[1] "The Chinese have two methods of copying pictures, known as *lin* and *mu*, described as follows by a writer of the Sung dynasty, A.D. 960–1260. "*Lin* consists in laying the original picture upon a table and reproducing it as nearly as possible on a piece of white silk arranged at the side. An unskilled artist cannot do this. *Mu* consists in taking a piece of silk and laying it down on the original picture, and then tracing over the latter. If the ink used is too thick, it will soak through the picture below and do considerable damage. Any one who lends a valuable picture to be copied thus, is simply throwing it away." This is interesting evidence to show that the Chinese painter was expected to draw in tracing size, whether he was tracing or not. Our method of copying pictures full-size, standing before the picture with our easel between us and the picture is certainly a mistake. In drawing from drawings as in drawing from Nature the pencil should follow the eye and the eye should be fixed on what is being drawn. We should draw always in tracing size and we should feel as if we were tracing whether we are tracing or not. To produce a full-size copy of a large picture we must have our easel and canvas alongside of the picture we are copying and, taking observations from a distance, we must walk up to the canvas and paint upon it in the manner described. If we stand by the canvas we cannot properly see the picture we are copying unless it is very small.

It is not at all difficult to get visual feeling into our drawings from Nature. The difficulty is to discover what is worth

[1] Published in Shanghai in 1905, p. 28.

drawing, to draw that and to leave out the rest, to distinguish the principal lines, to avoid what is accidental or irrelevant, to apprehend what is required to express the idea. That is where the difficulty comes. It is not difficult if you can follow your eye with your pencil to produce an expressive drawing, with visual feeling in the lines, but to express an idea which will be self-consistent and true is very difficult. The masters give us not only expressive lines with visual feeling in them; they give us their ideas as well. We can all of us follow the expressive method of drawing which the masters followed, but it will always be a question what we express so expressively. As a writer I write down the words as they occur to me one after another. It is expressive to do that and it is the right thing to do; to write it straight out "from the first word thereof to the last." But when I have done that, it is a question what I have expressed by writing. It is not different in drawing. When I draw I must follow the eye as closely as I can, from the first line thereof to the last, but I must not call in my friends at once to see the result. I must not send the drawing off to an exhibition just because I have expressively expressed myself. I must stop and consider what I have done. Does it represent what interests me? Does it stand for my interests and my ideas? If so are my interests and ideas so expressed worth while? Is there anything in my drawing to give it a permanent value among works of Art? With these questions in mind I turn to Nature to be sure that my drawing is true. I look over the drawings of the masters to be sure that my drawing is up to the highest standard of drawing. I compare my work with the very best of its kind. Is it true? If true, is the truth significant? Is the arrangement or composition of the lines all that it should be? Can I improve the composition? Is the execution as good as it ought to be? Have I followed my eye easily and successfully, or with difficulty? Are any of the lines automatic and inexpressive? Have I gone on drawing anywhere without following the eye or the visual imagination? In other

words, before I call in my friends or exhibit my drawing I subject it to a very searching criticism and measure it in view of the highest standards that I know, the Standard of Truth which I find in Nature and the Standard of Design and of Execution which I find in Art.

When our friends tell us that we must draw instinctively without intelligence they may mean that we must follow the eye and think of nothing else when we are drawing. If they mean that, I agree with them, only I insist that before drawing we should use our intelligence in deciding what to draw, observing, discriminating and selecting what is best, so that what we draw shall express that. Deciding what to draw, we draw it following the eye and we think of nothing else until the drawing is done. Then we begin to use our intelligence again criticising and judging the drawing we have made, to decide whether the drawing is true, as it should be, and well done as a work of Art. So it is when we draw from the visual imagination. We follow the imagination thinking of nothing else: but we must not follow it without a *parti pris*. We must have something in mind to express, a subject that interests us to proceed upon. We are supposed to have thought over many subjects before deciding what to draw. We have, therefore, used our intelligence or judgment in deciding what to draw. Then when it is drawn, following the visual imagination without conscious intelligence, we begin at once to consider the result. Does it express the idea? Is the idea self-consistent and true? Is there anything irrelevant or inconsistent in what we have done? Are there any lines which are automatic and inexpressive, lines drawn when we were not following the visual image, when the pencil ran off the track more or less? When the drawing is made it becomes at once an object to be judged and approved or disapproved according to the standard of Truth we have in our minds and the standard of Art. Assuming that we have been following our instincts without intelligence we must consider the result before we make any show or exhibition of it. If we don't do

that we proceed, not like men, not even like dogs, but like those very low creatures who have only their natural impulses and instincts and no judgment except to get the food they want and to avoid what is injurious or fatal. There is intelligence and judgment in that no doubt, though it is denied by certain philosophers who, untrue to their profession as lovers of wisdom, prefer instinct to anything else. Let us draw naturally and expressively by all means, following either the eye or the imagination. Then let us consider what we have done in view of Nature and in view of what has been done by others in Art. In that way our minds become filled with images not only of the objects in Nature which we have studied, drawing them and thinking about them in the terms of vision, but of the works of Art which we have studied; the truth of them in the forms of them. Then when we come back to our work and follow the eye or the visual imagination, intelligence comes into our work, into our Art, without our knowing it and we express not only what we see at the moment or imagine at the moment but much more than that.

In drawing from Nature we must draw always for facts, for knowledge, for the particular facts and knowledge that we want in view of the idea we have to express. It follows that we must keep away from the Schools of Drawing and Painting where people are drawing from casts and models with the idea of learning to draw. When they have spent some years in drawing from casts and models, set up as still life, they are just where they were before. They can draw, possibly, but what have they to express by drawing? They have no particular interests, no particular subjects they want to draw, no ideas, consequently no knowledge which is at all available for the expression of ideas. They know a few casts and a few models and poses which they have been drawing, not at all as subjects of interest, but with the idea of learning to draw. Why not learn to draw by drawing what interests us, what gives us pleasure when we see it in Nature. With this idea let

us draw, not "The Human Figure" but what interests us in it. Let us draw, not "Life," but what interests us particularly in life, what we discover in it that we want to draw. In drawing what interests us, following the eye or the visual imagination, we shall learn to draw and at the same time we shall be getting on in learning and in the power of expression. We do not learn to draw one thing by drawing another. How can I learn to draw "The Wrestlers" by drawing anything else? How can I learn to draw the pretty lady who is pouring tea for me by drawing any other subject? It is the same in drawing as it is in writing. I must have a subject to write about, and no amount of writing on other subjects will teach me to write on that one. In drawing, the first thing I require is an object of interest to me, and I learn to draw it by drawing it — certainly not by drawing something else. Why in the world should we shut ourselves up for years in a School just to draw from those stupid casts and models with the idea of doing something else presently? The Schools of Drawing and Painting and those casts and models should be given up. They have had more than a hundred years in which to prove their value and they have not proved it.

One of the arguments for the life class is that you get models at a very little expense. That is true, but you don't get them at all according to your ideas unless you select them and pose them yourself. If you cannot choose and pose the model the model is useless for your purpose, and you should think, not how little you pay for a model chosen and posed by other people, but how useless he is. You may not be interested in drawing from the nude. Then why draw from the nude? Why should you pay for the nude if you don't want to draw it? What do you want to draw? That is the question. When you have answered that question you know what to pay for if you cannot get it for nothing. You cannot work with other people in a class. You must have a place for yourself and models for yourself. You must work alone. Claude Monet said to me

once: "Why do these American painters come to Giverney? Is it that the sun does not shine in America?" Why go to the Schools of Drawing and Painting? Why not turn at once to Nature and to Life? It is in Nature and Life that we get our ideas and when we want to express them we should withdraw into the privacy and seclusion of our several work-shops to do it. This herding together in the Schools is a profound mistake. The individual loses his individuality and everybody does the same thing. When Claude Monet has painted his hay stacks and goes home those American painters at Giverney come down and settle in his place like birds of prey. No wonder that he is irritated. As if there were nothing else to paint in the world but what he has painted: nothing to do but what he has done.

The argument for the Schools that you get models at a very little expense is a fallacious argument. There is no need of a model unless you have an idea to express which involves the use and study of one. If you need a model you get one, the most suitable one you can find, and you pose the model according to your idea and get the knowledge you require. If you cannot afford a model, when you need one, you are to that extent handicapped in your work. You will do very well, being unable to afford the expense of models, if you use yourself as you see yourself in a mirror or in two mirrors. The old masters used themselves constantly. The fact that your right hand becomes your left makes no difference. You can get no end of information and facts using yourself and one or two mirrors. Of course it is more exciting to draw other people if they are interesting, but when you want some particular fact, when you want to know how the figure looks in a certain attitude or how the head connects with the body; when you want to see the hand or the foot in a certain attitude, the chances are that you can get this knowledge perfectly well by looking at yourself in a mirror or in two mirrors, if two are required. No one who has not used the reflections of himself in a mirror knows how much valuable knowledge may be obtained in that way. There is certainly no better practice for a por-

trait painter than to stand or sit before a mirror and compose portraits. He will get no end of suggestions, with no expense for models. With a lot of suggestions for portraits, expressed in drawings, he can show the drawings to the people who want portraits painted and they can choose the arrangement which pleases them best. In that way the portrait painter paints according to his idea and the sitter is put into his idea. It is very stupid to pose the model or the sitter without a preconceived idea of what you want to draw, and when it comes to drawing it is equally stupid to draw everything in sight. The painter should start with an idea always. He should pose the model or sitter according to his idea and then when it comes to drawing he should draw only what belongs to his idea. His judgment tells him what to draw and what not to draw and his imagination suggests what is required to complete the picture.

In closing this discussion of drawing I cannot do better than quote Mr. Whistler: "Nature contains the elements, in color and form, of all pictures, as the keyboard contains the notes of all Music. But the artist is born to pick and choose and group with science these elements, that the result may be beautiful, — as the musician gathers his notes and forms his chords, until he brings forth from chaos glorious harmony. To say to the painter that nature is to be taken as she is, is to say to the player that he may sit on the piano."[1]

II. THE MODE OF OUTLINES AND FLAT TONES

Having drawn any object, following the eye or the suggestions of the visual imagination, having defined the measures and shapes of the object by lines and outlines, it is possible to proceed further and describe the color of the object, and we can do this without going at all into the expression of form as revealed in light and shade. The color of the object may be described by a flat tone representing the local color as seen in light and at the distance which is suggested by the scale of

[1] Whistler: *Ten o'Clock.*

the drawing. If the drawing is life-size that means that the object is near the eye. The local color of the object may be matched in that case. If the drawing is reduced from life-size the local color of the object must be more or less modified. White must be represented by white, flesh by flesh color, red by red, yellow by yellow, blue by blue; but these colors of the different objects must be modified as a rule to represent the effects of distance, light and atmosphere.

The scale of the drawing should indicate the distance of the object, the size of the object being known. If the object is far off it must not be very intense in color. The local color must be neutralized. If the local color is light it must be lowered in value. If it is dark it must be raised in value. It must be remembered that the object when it disappears in the distance will have no color and be neither light nor dark.

The color of the light may be white or red or yellow or blue. It may be any color. It is under a neutral white light, of course, that the local coloring is most distinctly revealed. If the light is red, reds are particularly intense and prominent; yellows turn towards orange and blues towards violet and the greens are neutralized. In a yellow light yellows are particularly splendid; reds turn towards orange and blues towards green and the violets are neutralized. Under a blue light the blues are particularly beautiful; reds turn towards purple and yellows towards yellow green and the oranges are neutralized. Following these observations, it is not at all difficult to bring a number and variety of local colorings into the tonality of a single light. It is not a bad plan to assume that the color of the light is white. Assuming that the light is colored, it will be necessary to sacrifice the truth of local color for the truth of light. In a red light the greens are neutralized and spoiled. In a yellow light the violets are spoiled. In a blue light the oranges are spoiled. It is only in a white light that you distinguish and appreciate all the differences of local color.

It follows from what has been said, that if a picture is to be

shown in a red light it is well to avoid greens when you paint it. The greens will be spoiled. If the picture is to be shown in a yellow light leave out the violets. They cannot exist in a yellow light. If the picture is to be shown in a blue light leave out all oranges. If you put them in, the light will take them out. The effect of a yellow light in pictures is better as a rule than the effect of a red or a blue light. In a yellow light the reds are pulled towards orange, the oranges towards yellow, the blues towards green, the greens towards yellow. The only color which is spoiled in that case is violet, which can be better spared than any other. A yellow light is therefore to be preferred to a light of any other color. The great masters of the Renaissance appreciated the splendor and beauty of color which they could produce in the tonality of a yellow light, and they adopted it, almost invariably. The result is that violet is very rarely if ever seen in their pictures. Violet is almost sure to disappear anyway in oil paintings owing to the yellowing effect of oils and varnishes. I confess, however, that I get tired of the tonality of yellow which I see in so many old pictures. I long for the individualities of local color which I see in Nature on a clear day. To get all the differences of color which I see in Nature into my pictures I must proceed upon the assumption of a neutral white light. It is the only light which gives me a full scale of all colors and the possibility of all colors in high degrees of intensity. No color can be spoiled by a light which is colorless.

Let us assume, also, that our pictures will be seen in a white light and on a wall in which the white of the pictures is reproduced. As the white in our pictures is pretty sure to be lowered in tone and somewhat yellowed by oil and varnish the wall should be reduced from pure white and slightly yellowed.

A drawing being made in lines and outlines, the outlines are filled in with tones representing local colors as seen in different effects of distance, light and atmosphere. It is not necessary, however, to draw the lines and outlines first before

putting in the tones. It is possible to establish the tones and tone contrasts first and to bring them to definite measures and shapes afterwards. Taking a tone from the palette we can spread it and draw with it at the same time. The outlines and inner markings may then be put in or omitted. In case they are omitted, the objects are distinguished merely by differences of tone; differences of value, color and color-intensity. As a rule, the tones should be separated by lines and outlines. The lines give distinction to the tones and a very desirable definition to the shapes; but they can be put into the picture in the beginning, before the coloring, or afterwards when the coloring is completed.

We have many wonderful paintings in the Mode of Outlines and Flat tones. It is the mode which was practiced by the Egyptians in the tomb paintings at Beni Hasan and at other places. There are fine examples in the Museum at Cairo and in the British Museum. It is this mode of the art, with very definite outlines, that was practiced by the Greeks in their vase painting. The finest examples are those which were produced just before the end of the sixth century before Christ and in the first quarter of the fifth century. There are great collections of these vases in the British Museum, in the Louvre and in other places in Europe. The most important collection in America is in the Boston Museum. Nothing remains of the mural painting of the Greeks. It was in the Mode of Outline and Flat tones, without doubt, until the discovery and introduction of painting in relief and chiaroscuro, towards the middle of the fifth century. After that the painters produced effects of relief and of chiaroscuro, such as we see on the walls of the Roman houses, at Pompeii and other places. There are some fine examples in New York, in the Metropolitan Museum. I cannot look at these Roman paintings, however, without a feeling of regret, that the Mode of Outlines and Flat tones should have passed away, that it never came to us as an inheritance.

The only painting in Outlines and Flat Tones and in Repre-

sentation, which we have in Western Art after the middle of the fifth century is the painting, if we can call it painting, which we have in the stained glass windows of Gothic churches of the twelfth and the thirteenth centuries; but the tones did not remain flat very long. In the later glass the figures and draperies are modelled in effects of relief or of light and shade. Even in the earlier glass the painted lines suggest modelling where there is none.

We have interesting examples of painting in Outlines and Flat Tones in the Persian and Indian miniatures, book illustrations most of them. The earliest examples are the best. The line drawing is not very expressive, but as color compositions these paintings have a peculiar interest. The colors are very pure; the color contrasts are very strong. At the same time the effect of this strong coloring is very beautiful. We see that variety in color and strong contrasts are not always to be avoided. Some of the Persian and Mohammedan miniatures remind us of the paintings of Fra Angelico, — if we could eliminate from the work of that master all expression of form and leave in it only its shapes of color.

It is in the Far East, in China and Japan, that we find best illustrations of the Mode of Outlines and Flat Tones. It is certainly in the Far East that the supreme examples were produced. We see them in Buddhist paintings of the early periods, both Chinese and Japanese. Thinking of these Buddhist paintings, I am tempted to say that no pictures have ever been painted, in any mode of the Art, so profound in meaning and so beautiful in design and execution.

We have fine examples of painting in Outlines and Flat Tones in the gold screens with figures of the Tosa and Kano schools of Japan: particularly in the works of Kano Yeitoku and Kano Sanraku and in the exquisite art of the so-called School of Matahei. We have still other examples in the art of Koyetsu, of Sotatsu and of Korin.

The principal collections of Chinese and Japanese painting accessible to students are in the Museums of Tokyo, of Kyoto

and Nara in Japan. We have a large and fine Collection, one of the best, in the Museum of Boston. Mr. Charles L. Freer has a very important collection in Detroit, which in due time is to go to Washington and become the property of the Nation. In England the Collection of the British Museum is the best. There are many fine examples in private collections in China, in Japan, in America and in Europe, but these are, most of them, inaccessible to the student.

The terms of this painting, outlines and flat tones, are from our point of view very rudimentary. Accustomed to the expression of form in effects of light and shade, it seems to us that nothing we really care for can be expressed in any other way. We must study the examples of painting which I have described, in which there is no expression whatever of form, only the suggestion of it. When we have studied them and know them well, we realize that the limitations of the mode which seem at first very severe are not so. The representations of Nature and Life which have been achieved in these limitations are often very specific and particular. There are portraits, for example, in which the individual represented is perfectly characterised and described. Portraiture is by no means impossible to the Mode of Outlines and Flat Tones. Some of the finest portraits in the world have been achieved in this mode. I can think of nothing finer in portraiture, nothing more characteristic of individuality or personality than portraits I have seen in the temples and museums of Japan. The heads are wonderfully drawn, in pure lines and outlines, and the tones within the outlines, though perfectly flat, seem modelled, because the outlines and inner markings are so characteristic and true.

There has been a great deal of portrait painting in China from very early times. The story is told of Hsieh Ho, a Chinese painter who flourished in the fifth and sixth centuries, that he was a particularly clever portrait painter. He required no sittings, but after a glance at his sitter he could go home and

produce his likeness from memory without fault of any kind.[1] Chu Hsi a famous scholar and philosopher (1130–1200 A.D.) describes two portraits that he had had painted of himself "one large and the other small; and it was quite a joke to see how accurately the painter reproduced my coarse ugly face and my vulgar rustic turn of mind."[2]

A certain Chinese writer of the twelfth century writes as follows:[3] "There is no branch of painting so difficult as portrait painting. It is not that reproduction of the features is difficult; the difficulty lies in painting the springs of action hidden in the heart. The face of a great man may resemble that of a mean man, but their hearts will not be alike. Therefore, to paint a likeness which does not exhibit these heart-impulses, leaving it an open question whether the sitter is a great man or a mean man, is to be unskilled in the art of portraiture."

I have the portrait of a lady, painted on silk in the early part of the Yüan or Mongol Dynasty (A.D. 1260–1368), in which the individual characteristics of the sitter are unmistakably revealed. Abstract as it is, in its severe delineation and perfectly flat tones, it is almost realistic as a portrait. This portrait is loaned to the Museum in Boston and may be seen there by any one who wishes to see it. Mr. Freer has some fine portraits in his collection.

We have in the Japanese color-prints of the eighteenth century the best known and most widely appreciated examples of drawing in outlines and of painting in flat tones. Examples may be seen almost everywhere, except in Japan where they properly belong. These prints have not been appreciated by the Japanese collectors and they are not shown in the Japanese Museums. They have been regarded as the art of the common people and have not been considered seriously by the upper classes. The best prints are to be seen, therefore,

[1] Herbert A. Giles: *Introduction to the History of Chinese Pictorial Art.* Shanghai, 1905, p. 26.

[2] Giles, p. 124.

[3] Giles, p. 124.

not in Japan, the country in which they were produced, but in Europe and in America, to which countries they have been imported by thousands. We have at least twenty thousand of these prints in the Boston Museum. There are large and fine collections in New York and Chicago and also in Paris. It was in Paris that the serious collecting of these prints began. From Paris the interest has spread all over Europe and America. Strangely enough it is now reaching Japan. The life of the Japanese in the eighteenth century is presented to us in these prints with extraordinary truth and in forms of Design which reveal unmistakably the Sense of Beauty. It is not generally understood that the Japanese colored prints have the same value as the vase paintings of the Greeks, as a record of Life and an achievement in Art. Not to care for them means that you do not appreciate good drawing when you see it or good design. There are far more important examples of drawing and design in the work of earlier times and greater masters; but nothing so delightfully descriptive of everyday life and everybody's interests has ever been produced. If you want Art for everybody which everybody can understand, this is it. The Japanese prints are intensely interesting as pictures of Life and perfectly charming as works of art.

It is very sad to think of the passing of this mode of the Art in which so many wonderful things have been produced. The Japanese are giving it up. They are persuaded, by us, that representation in realistic effects of light and shade is the best form of representation. They are no longer satisfied with the unmistakable suggestion of form which may be achieved by outlines and flat tones, when the outlines are well drawn and the right tones spread within them. They know nothing about the very low relief modelling of the Sienese and Florentine painters which ought to appeal to them; being logically and properly the next thing to painting in Outlines and Flat Tones, — the next stage in the evolution and development of the Art. The Japanese are jumping over centuries of natural evolution and development and are passing from the most thoughtful

and least imitative mode of the Art to the least thoughtful and most imitative. Schools of Drawing and Painting, modelled upon our schools and quite as bad, are being established everywhere in Japan, and the pictures which are now painted resemble those we paint ourselves except that the Life represented is that of Japan. Japanese life, however, will soon be a thing of the past. The Japanese are building houses like ours, dressing themselves as we dress and imitating us in everything so far as they can. Tokyo already begins to look like a city in America and the Japanese look like Americans, until we see their faces.

Drawing and Painting in Outlines and Flat Tones has been recently revived by some of our illustrators, under the influence, probably, of the Japanese color-prints. Some interesting things have been done. Good examples may be seen in the French posters and in the illustrations of Simplicissimus. In considering these examples it is worth while to observe how little we miss the expression of form. Form is so clearly and unmistakably suggested by the outlines, when well drawn, and by the flat tones when true to Nature.

The Mode of Outlines and Flat Tones is the mode of representation in which the principles of Order and Design are most easily followed. It is comparatively easy to achieve the Truth of Representation in good forms of Design when the problem is not complicated by the difficulties of form-drawing in effects of light and shade. As representation becomes specific, statistical, imitative and realistic, Design becomes almost impossible. The modern painter who imitates and copies what he sees as he sees it forgets that there is such a thing as Design. He finds it impossible to imitate the accidents of vision and at the same time to think of Design. So Design is forgotten. If the impressionist painter thinks of it at all he will tell you that there is nothing in it. The painter in Outlines and Flat Tones who considers only the shapes and the colors of things and depends upon his lines and his colors to suggest form finds himself free, as in no other mode of the Art, to consider

the possibilities of Order and Beauty in the arrangement and composition of the objects and figures and the possibilities of good taste in the choice and distribution of the colors. At the same time the truth which he is able to express by lines and outlines and flat tones is by no means limited. The shape of an object and its color or colors is the very gist of it surely. When the truth of shape and of color is given the truth of form is unmistakably suggested. It is only necessary, as I have said, to look at some of the portraits we have in early Chinese and Japanese painting to feel how much of individual character may be expressed without any form-drawing, without any effect of relief or of light and shade, or any particular consideration of the rules of perspective.

The rules of perspective have been known and understood in China for a long time, for centuries. The knowledge of perspective came from Europe, no doubt, but it came from Europe a long time ago. It was called a knowledge of the "large and the small and the near and the far." It was never overvalued as it has been with us. It was regarded as a legitimate interest but not a very important interest. The idea was that anybody can understand the rules of perspective who puts his mind upon them but painting a fine picture is another matter. The Chinese and Japanese painters have always felt that the rules of perspective must not be allowed to interfere with the dictates of good taste. If you make a good composition of lines and colors you need not worry about perspective. You must not let it be on your mind or in your way. When the artist follows the eye in his drawing he does not have to think about the rules of perspective. Perspective comes all right. Place yourself where you can see your subject properly, within a visual angle of thirty degrees; then follow the eye with your pencil and draw what you see as you see it in the manner of tracing and in tracing size and you have no occasion to think about perspective. When it comes to drawing from the imagination, you draw from what you imagine as visible. What you imagine as visible ought to be in perspective. If it is not

in perspective the eye, properly trained, ought to detect the error and suggest the necessary correction. It is a very good thing, however, in view of imaginative composition, to understand the Theory of Perspective, and the practice of Perspective-Drawing is a very good training for the eye.

There is no doubt that the Chinese and Japanese have regularly followed the eye in drawing and have not thought at all about directions, triangulations or proportions, or about the rules of Perspective. A certain Chinese writer, Su Shih, of the Sung Dynasty, a philosopher, statesman, poet and painter, says of drawing that it cannot be taught for "it depends upon the coördination of hand and eye which comes about unconsciously." "How," he says, "can you impart that of which you are unconscious?"[1] This is a clear indication that the Chinese painters, when they were drawing, followed the eye or the visual imagination; for it is only when we draw in that way that we can draw unconsciously, without thinking about directions, triangulations, proportions and the rules of Perspective.

The Chinese and Japanese painters made drawings from Nature, constantly. Then thinking about their drawings and the experiences represented in them, they proceeded to paint pictures according to their thoughts and ideas. Huang Kung-wang, one of the most famous painters of the Yüan Dynasty, used to go about everywhere with "paper and brush in his sleeve" and "when he came to any particularly beautiful scenery or objects he would take rough sketches which he would afterwards study at leisure. The result was, that the magic effects of morning and evening upon the mountains, the four seasons with their varying harmonies of light and darkness, were all stored up in his mind and thrown into shape by his brush."[2]

III. CHINESE AND JAPANESE INK PAINTING

I must now describe a kind of painting which was practiced in China in very early times, and was introduced into Japan during the fourteenth and fifteenth centuries. This painting

[1] Giles: *Introduction*, p. 105.

[2] Giles: *Introduction*, p. 142.

was done with a brush and Chinese ink either on silk or on paper. The effect was in black and white. Color was seldom introduced. Confucius speaks of "the sequence of white." He means, no doubt, the scale of neutral values passing from black to white. This is the scale of all ink painting. The outlines in this type of painting were not necessarily definite or distinct. The tones within the outlines were not necessarily flat. The movements were not in the sequences of the lines alone but in gradations from dark to light and from light to dark. These gradations were not used to express form, however, or to produce effects of light and shade. There was no expression of form as we understand it. The effects of light and dark (*notan*) were not effects of light and shade. The definitions were achieved by strokes and lines, while the gradations served to bring in the element of mystery. They were rather concealing than revealing. The idea is that what is unseen is more impressive than what is seen. The soul of the thing is never seen. We see the cup but not the inside of it which is *it*. We see the surface of life, but life itself is never seen and can never be painted, only suggested. In this type of painting, objects, people and things are not imitated very closely. They are rather suggested and they must not be suggested too obviously. A few strokes, a few splashes of ink, a few washes and gradations; that is enough, if it draws you into a certain interest, into a certain association of ideas, into a certain mood or state of mind and does that in a masterly way. To accomplish this end, imitating and describing nothing but suggesting everything, is the aim of it all. It is a kind of writing about things, in which the writing must be very well done as a work of art. We see the idea and the method of this painting in the Chinese characters or ideographs. The same surfaces were used, the same brushes and the same ink, both in writing and in painting. The method of painting was used in writing and the method of writing was used in painting. The picture, like the written character, was an ideograph, the sign of an idea.

The first thing to think of was the movement of the brush in making the stroke. It represented the start and beginning of Life. The next thing to think of was the composition of the ideograph or picture, as a composition of strokes. The third thing to think of was the Truth of Representation, but only as much of it as was required to convey the idea, no more, no less. The fourth thing to think of was the spreading of the ink in washes and gradations or the spreading of the colors, if colors were introduced. The fifth thing to think of was "artistic composition." The sixth and last thing to think of was "finish." Exactly what is meant by "artistic composition" and "finish" I cannot say. All I know is that they were the last things considered, after the main idea of the ideograph or picture had been expressed. They suggest something added in the way of ornament, something superfluous. As I see nothing that is superfluous in the best Chinese painting, I will not undertake to explain what is meant by the words "artistic composition" and "finish." They are English translations of Chinese characters which may not give us the Chinese ideas. These six rules of painting are the Six Canons of Hsieh Ho, called Shakaku by the Japanese.[1] He was a successful portrait painter in the fifth and sixth centuries of our era.

The painting which has developed upon the basis of these "Six Canons" has a peculiar interest and value. It is the most conventional painting we know. At the same time it is the most expressive painting we know. It is a kind of poetry appealing to the eye. The Chinese poet and the Chinese painter were very near together. A few ideographs, carefully selected and well arranged, made a poem. A few ideographic strokes of the brush with a few washes and gradations of ink, "like clouds or water flowing," made a picture.

If you want to get an idea of this Chinese ink painting take a crystal or glass ball, as large a one as you can get, and roll it about among the objects of vision. As you look into the ball you see that nothing outside of it is reproduced. You

[1] Giles: *Introduction*, p. 28.

see in it a mystery of tones and measures and shapes. In this mystery which symbolizes the mystery of life you find your idea. The crystal ball represents the activity of the imagination as it plays with the tones and measures and shapes of vision and makes what it pleases out of them. Following its suggestions with your brush you express your idea. There is certainly no mode of painting which is so expressive and so little descriptive in our sense of the term. It is never a transcription of objects, people and things, as we see them in visual experience. It is like literature which as Cardinal Newman says, "expresses not objective truth, as it is called, but subjective; not things but thoughts."

The knowledge of writing and of painting must have been widespread in China, in very early times. A Mohammedan traveller returning from China some time in the ninth century says: "Among all God's creatures the Chinese have the greatest skill with their hands. . . . Everybody in China, the high and the low, the rich and the poor, learn to draw as well as to write." [1] I wish it could be said of us, that all those who write know how to draw. Even writing is, with us, becoming a thing of the past. The typewriter is almost the only writer. We are supposed to write polite notes to our friends but we use the telephone instead.

The examples of Chinese Ink Painting are many. I should like to give a list of the masters whose work I have seen with wonder and delight, but such a list would mean nothing to the reader who has not seen the pictures and if he has seen the pictures a list of names is unnecessary. The finest examples we have of Chinese Ink Painting were produced by the painters of the Tang, Sung and Yüan Dynasties and during the early part of the Ming Dynasty. Among many great Masters there are two I think of particularly; Mokkei and Ba-yen. The methods of the Chinese painters were introduced into Japan towards the end of the Kamakura Period and after-

[1] Wallis: *Persian Ceramic Art*, p. 34 *et seq.* He refers to M. Reinard: *Relation des voyages faits par les Arabes et les Persans.*

wards. They were there practised by Shiubun, Sesshu, Sesson and Jasoku, and later by Soami, Sotan, Motonobu and others with great success.

It is doubtful whether we should ever try to follow this type of painting ourselves, — it is so closely connected with a method of writing that we know nothing about; except as we see examples of it which we cannot read or understand. If we do not practice the writing we cannot successfully practice the painting which is connected with it. It is not so difficult, however, to appreciate and enjoy good painting of this kind, because it is so easy to see exactly how it was done. There is no painting in which the performance of the painter is so clearly revealed in his work. For the same reason it is not at all difficult for us to appreciate and enjoy the writing. It is only necessary to see and compare good specimens of writing and we begin at once to appreciate what is excellent and masterly in the brush work. Some of my Japanese friends wonder how it is that I recognise what is well written when I am unable to read it. It is not the writing that I appreciate but the brush work. I see how it was done and rejoice in the astonishing skill of it. I see no possibility, however, of our taking up the practice of Chinese Ink Painting, unless we are prepared to take up at the same time the practice of ideographic writing upon which this painting is based. The writing of a–b–c's with a pencil or a pen and the writing of the words which we spell with these letters is no preparation whatever for such painting. This we understand at once when we have studied the Chinese ideographs and have tried to reproduce them. I have collected a good many copy books of Chinese writing and I have reproductions of the brush work of Teiken of the Tang Dynasty, of To Ki Sho of the Ming Dynasty and other famous writers. To look at these writings and at the paintings I have described, in which we see precisely the same brush work, is to give up the idea of doing such work. It is inconceivable that we should be in any degree successful in following these precedents. At the same time the Chinese

and Japanese ink painting is suggestive of a method of thinking about what we see and expressing our thoughts which we may do well to follow.

I have a little primer of drawing published in Japan, one of many such, in which certain pictures are analyzed into certain lines and spots. The student is expected to produce the lines and the spots, one at a time, until he can produce them easily and well. Then he puts them together, two and three together, then more together, until he is able to put them all together and so reproduce the picture. The question is who can do this best. I have, also, an interesting book on the Bamboo in which the same method is followed. On the first pages you see the strokes which characterize the growth of the bamboo from the first sprouting of the seed. These strokes, lines and spots, are then put together to describe the possible developments of the stalk, the branches and the foliage. There are several volumes of these illustrations, all most beautifully composed, and executed with great skill. In the last volume we have a description of the bamboo in its proper life; in spring, in summer, in autumn, in winter; in fine weather, in a storm of rain, in a storm of wind and blown down into a stream of water and dragged in the current of it: then, at last, we see the bamboo at night with the full moon behind it. As soon as the elementary strokes have been mastered and the connections between them understood the painter follows the suggestions of the imagination and gives us in his pictures not an imitation of Nature but knowledge in the form of ideas, one idea in each picture. He thinks of the bamboo in lines and spots of paint exactly as we think of objects, people and things in the terms of language and then, speaking or writing, express our thoughts.

The art of painting, as practiced in China and Japan, has been almost as conventional as the art of writing. The painter selected from a list of well-known subjects the one he proposed to paint and unless he was a painter of unexpected originality he took the usual arrangement and composition of

the subject and reproduced it. It was well understood that he might do that. He was expected to do it. Every painter did it, as a matter of course. Thus the problem of Art was not so much a question of invention and of composition as of performance. It was like a performance by different persons of a certain piece of music previously composed. We may have a performance of the E flat Concerto of Liszt by Liszt himself or by Rubenstein or by anybody else who plays on the piano sufficiently well. Certain compositions were performed, by all painters, by good painters and by poor painters. Certain compositions representing the four seasons were performed again and again. There were certain well-known landscape subjects. Then there were certain amusements and accomplishments which were to be represented in a certain way. All these subjects were performed again and again by everybody who painted. It was a question about each composition; who could perform it best. In ignorance we call these repetitions of one subject "copies" and wonder which is the original and wonder, perhaps, whether the particular example in our possession is not the original. These repetitions are not copies but original performances of traditional subjects and traditional compositions. Under these conditions the artist had little or no credit for originality in the choice of his subject or in the composition of it, as a whole. His reputation rested on his brushwork. He was simply a performer, a *virtuoso* with the brush. As time went on new forms, new compositions, were invented for the old subjects but it was a very long time before the painter was free to invent new subjects and a variety of compositions for each one, free to follow his own particular interests and ideas. The supreme masterpieces of the art come to us from the very early times when there was a strict limitation both of subject and of treatment, when the performance was everything and nothing else was considered. With a multiplicity of subjects to choose from, with infinite possibilities in arrangement and composition the ability of the painter is dissipated. Trying to

do many things he does nothing very well and prides himself as an inventor of subjects and of designs rather than a performer in painting. The attention of the public is very easily diverted from the performance to a consideration of the thing performed. The art is no longer the art of painting well but the art of producing interesting pictures whether they are well painted or not.

This brings us to an everlasting question: shall we confine our attention to one subject? Taking one subject shall we try to give it a form of expression which shall be final and a performance which shall be faultless or shall we prefer a variety of subjects less carefully thought out and not so well painted? This is certainly what the modern public prefers. If we paint for the public we know what to do. The public was never thought of in China and Japan in early times. Writing and Painting, Music and Poetry, were the accomplishments of a gentleman. They were the finest pleasures of that simple life devoted to Art which has passed away.

IV. THE EXPRESSION OF FORM IN DRAWING AND PAINTING

The simplest method of painting in representation is the one which I have described, — the method of Outlines and Flat Tones. A drawing being made, the local color of the object is reproduced as it is seen in a certain light and at a certain distance. In that way the shape and the color of the object are described, but not the form, unless the object is flat. We think of shapes as flat, of forms as cubical or spherical or otherwise solid.

There are three ways in which we think of form. We can think of it as revealed in an all-round light which casts no shadows. Thinking of form in that way we describe it so far as we can without shadows. We can think of form, also, as revealed in a light casting shadows; that is to say we can think of the form in light and shade or in what is often called chiaroscuro. Thinking of it in that way we paint it in that way, in an effect of light and shade. We can think of form, also, as emerging into

view out of darkness, as coming up from darkness through shadows and cast shadows into the light. In that case we represent it in that way. The difference between the second point of view and the third may not be understood at first thought. It will be explained presently.

A. Form and Color in Light

The Chinese and Japanese painters who painted in the mode of Outlines and Flat Tones, never thought of objects as coming out of darkness, nor did they think of them in light and shade but always in light. Darkness was regarded as the denial of vision and shadows were regarded as obstacles in the way of vision, to be ignored. The object was to be painted as most completely and satisfactorily seen, wholly in light. The Chinese and Japanese painters were satisfied with the expression of shape and of color. They left the expression of form to the Sculptor. They were satisfied with the unmistakable suggestion of form which they were able to achieve by correct outlines and true coloring. They thought of the solid but they did not undertake to represent it.

The early Florentine, Sienese and Umbrian painters owing, no doubt, to the influence of Greek, Roman and Byzantine precedents had an idea that forms should be expressed as well as shapes and colors. At the same time, they were unwilling that anything of interest should be concealed or hidden. If form was to be expressed it must be expressed in light and, so far as possible, without shadows. As for darkness, it must be left out altogether. When the object was drawn in outlines and the tone representing the local color of the object had been spread within the outlines, it was decided, in order to express form, to distinguish the parts of the object which were in most light from the parts which were in less light, and these from the parts which were in least light. In that way the expression of form was achieved in three planes, all planes of the light, and the character of the form was clearly indicated without shadows. The object was not distributed

into two planes (one representing the light the other representing the shadow) but into three planes, all planes of the light, — one of more light, one of less light and one of least light. In that way the concavities and convexities of the surface, its ins and outs or ups and downs, were represented in a low relief without shadows and there was no suggestion of darkness anywhere. It was Dante's idea, and it was no doubt the idea of the Church, that in Paradise there was no darkness. The Blessed of the Lord moved in a diffusion of light in which no shadows were cast, in which all forms and colors were fully and gloriously revealed. Proceeding with this idea, it was impossible for the painters of altar-pieces to follow Roman or Byzantine precedents. The idea of light was all right but the idea of light with shadows was all wrong. In Duccio we see the end, a very wonderful end, of Byzantine Painting. In Giotto we have the beginning of another chapter in the History of the Art. Cennino Cennini, who was the pupil of Agnolo Gaddi, who was the son of Taddeo Gaddi, who was the pupil of Giotto, writing at the end of the fourteenth century, says: "This Giotto changed the art of painting from the Greek to the Latin [manner] and brought it into the modern [style]." [1] Dante, no doubt, had something to do with the new departure.

Giotto and his followers in the Florentine School, Simone Martini, the Lorenzetti, Sasseta and others at Siena were not quite prepared to leave all expression of form to the Sculptor as the Chinese and Japanese did. They decided to follow the Sculptor to the point of a low and flat relief. With that idea they regarded the surface of the wall or the panel upon which they painted as if it were a slab of stone. They thought of the light falling upon the surface and they followed the light in their drawing and painting precisely as the Sculptor followed it in his cutting and carving. That this was

[1] Cennino Cennini: *The Book of the Art.* Translation by Christiana Herringham. New York: Francis P. Harper. London: George Allen, 1899. Chap. 1, p. 5.

the idea of these early painters is clearly proved by a passage in the "Trattato" of Cennino Cennini. "If by accident," he says, "it should happen, that when drawing or copying in chapels, or colouring in other unfavourable places, you cannot have the light on your left hand, or in your usual manner, be sure to give relief to your figures or design according to the arrangement of the windows which you find in these places, which have to give you light, and thus accommodating yourself to the light on which side soever it may be, give the proper lights and shadows. Or if it were to happen that the light should enter or shine right opposite or full in your face, make your lights and shades accordingly; or if the light should be favourable at a window larger than the others in the above-mentioned places, adopt always the best light, and try to understand and follow it carefully, because, wanting this, your work would be without relief, a foolish thing, without mastery." [1] It is very clear from this passage that the painters felt like Sculptors when they were modelling their forms. Starting with a flat surface they made it bulge a little by means of slightly higher tones and they made it go back by means of slightly lower tones. The idea that the eye must follow the light is a very interesting one. It is the eye of the visual imagination, of course, that is referred to. In imaginative work we follow the eye precisely as we follow it when we really see the object that we are drawing.

The early Florentine, Sienese and Umbrian painters thought of three planes in their modelling of form, — the plane of more light, the plane of less light and the plane of least light, and these planes were kept quite close together to avoid the suggestion of shadows. The skillful painter was able sometimes to introduce intermediate planes, but it was difficult to do that without getting into darkness. It was easier, as a rule, to increase the number of planes by adding higher and higher lights, up towards white and sometimes reaching white; but

[1] Cennino Cennini: *The Book of the Art*, chap. 9, p. 10.

"the three divisions," as they were called, were kept constantly in mind. Cennini speaks again and again of "the three divisions" and describes very fully the practice of coloring in these divisions. The practice was to prepare a separate tone for each plane of the modelling, to have the tones in vases and the vases set in an orderly sequence: "that you may not mistake one for the other. In this manner you may paint any color you please, either red or white or yellow or green." Cennini had a scale of five colors in mind: Red, Yellow, Green, Blue and Purple.[1] Leonardo speaks of the same five colors, but he adds a color he calls umber, which is no color, of course, but a derivative.[2] This scale of five colors is a very good scale to think of and I have sometimes been inclined to adopt it in the place of the scale of six colors which I have recommended to the readers of this book. It is not only the color scale of the Italian painters but of the Chinese and Japanese painters as well. The question is whether Green shall be regarded as a principal color or as an intermediate; whether Orange and Violet are not, properly speaking, intermediates.

The coloring of the early Florentine, Sienese and Umbrian masters is very beautiful and it is with profound regret that I see it wholly given up. The Chinese and Japanese painters of to-day who are thinking that painting with no expression of form is a very rudimentary and undeveloped kind of painting, to be given up, should consider the expression of form in light as it was achieved by the early Italian painters and try that, before taking up the later modes of the art, in which form is achieved in effects of light and shade or is seen emerging out of darkness. It is a pity to pass, without hesitation, from a world of light into a world of shadows and of darkness.

The terminal figure of the School of Giotto and of the Sienese and Umbrian Schools which were under his influence is Fra Angelico. He and his associates Alessio Baldovinetti and Benozzo Gozzoli were not the last painters who thought

[1] Cennino Cennini: *The Book of the Art*, chap. 145, p. 124.
[2] Leonardo: *Treatise on Drawing and Painting*, §. 226.

of form in light without shadows, but the later men preferred, as a rule, the idea of light and shade.

In the diagram on page 165 the reader will find an analysis of the early Florentine, Sienese and Umbrian idea of painting and an explanation of the method of using it with palette 1 which is described on page 45.

B. Form and Color in Light and Shade

The method of painting which I have just described was followed by all the painters of Central Italy until the time of Masaccio and the beginning of the fifteenth century. To Masaccio, more than to any other one painter, is to be attributed the idea of form in light and shade or in chiaroscuro. In the works of Masaccio and his followers the light of the world is substituted for the light of Paradise. The painters were no longer afraid of shadows. They no longer avoided them but were delighted to represent them. Paolo Uccello and Piero della Francesca must be thought of in connection with Masaccio in this new beginning. The laws of perspective and of chiaroscuro were thought out and mastered. Nature was studied with many new ideas and unprecedented things were done in painting. There were revulsions of feeling and returns to the earlier method but it was sooner or later abandoned.

In the new system of painting the old idea of modelling form in three planes, all planes of the light, was given up for the new idea of modelling in two planes, — one the plane of the light, the other the plane of the shadow. Having established these two planes, an effect was produced, which was unprecedented and astonishing. When the two planes were close together in the scale of values, as they were in the beginning, the form was clearly suggested. When the two planes were separated the need of additional planes was felt and they were introduced. A plane of half tones was introduced, between the plane of the light and of the shadow, a plane of higher lights was added and a plane of lower darks. In that way the form became complete. Nothing more was needed. Theoretically

FORM IN LIGHT

PALETTE 1

the form might be more completely modelled in nine planes, but to do that is technically very difficult. The details of modelling were achieved by very slight color and value differences which were found within the limits of each plane and the number of planes was rarely increased beyond five.

The anatomy of this modelling is very clearly exhibited in the work of Andrea Mantegna who applied to his painting all the scientific knowledge of his age. Scientific knowledge was in his case no obstacle to expression. His methods were thoroughly scientific. He, nevertheless, painted some of the masterpieces of the art. Leonardo, too, was scientific in his methods, as we can see not only in his pictures but in his Treatise on Painting. "Those," he says, "who become enamoured of the practice of the art without having previously applied themselves to the diligent study of the scientific part of it, may be compared to mariners, who put to sea in a ship without rudder or compass, and therefore cannot be certain of arriving at the wished-for port. Practice must always be founded on good theory." [1]

The color of any object is best seen in the plane of the light, not in the plane of the shadow. As the light diminishes the color of the object begins to disappear, and it disappears entirely when it reaches darkness. The high lights are apt to be reflections of light, particularly if the surface represented is smooth or polished. The high light on the nose or the forehead may be the light of the sky rather than a light of flesh color. The local color of the object is best seen, therefore, in the plane of the light. It disappears as it passes into the half light, into the shadow and into the shadow of the shadow; there being no light of reflection to intensify the color in the shadow. That is the law of color as we see it in Nature and it is proper that we should follow it in painting. It was very rarely followed, however, by the Italian painters. Leonardo states the law, again and again, and says that the painter should follow it. At the same time he states the reason why the painters did not

[1] Leonardo: *Treatise on Painting*, § 112.

follow it. "Black," he tells us, "is most beautiful in the shades; white in the strongest light; blue and green in the half tone; yellow and red in the principal light." [1] It was a regular practice of the painters to put the colors where they looked best, whether in the light or in the shadow, in the high light, the half light or the extreme dark. Wherever the color looked best there it was put. In this practice the painters deliberately sacrificed the truth of representation to follow the law of color as it is seen in the Spectrum and no less distinctly in pigment materials. The early painters who give us form and color in light ought to have made the color most intense in the half tone between the higher lights and the lower lights of their modelling, but they were very apt to have the most intense color in the lower lights. Having it there they put in white to pull the color up to the lights and still more white to pull it up to the higher lights. The painters in the mode of chiaroscuro understood the problem better. If they put the intensity of any color in the shadow or in the dark it was because it occurred there naturally and looked best there. So yellows were put in high values, reds, greens and blues in middle values and purples in low values, deliberately. The loss of color in diminishing light was thus ignored, in order to have each color where it looked best.

Another thing which the painters did, constantly, the early painters and the later ones, also, was to change the color from plane to plane. Leonardo warned them "to remember that the shadows are never to be of such a quality as to obliterate the proper color in which they originate." [2] In spite of this warning the painters very constantly modelled the form in a sequence which was not only a sequence of values but a sequence of colors. They loved to see reds rising into orange reds, greens into yellow greens, blues into green blues, purples into reds. In this practice they were considering the law of colors as shown in the Spectrum and as seen in pigment materials,

[1] Leonardo: *Treatise on Painting.* The chapter on Colors, particularly § 234.

[2] Leonardo: *Treatise on Painting,* § 246.

and preferred to follow that law even when it meant a sacrifice of truth in the effect produced. The painters felt, probably, that it was their business, as painters, to use their pigments properly, even if the effect of doing so was less true. Perhaps, after all, the expression of form belongs to Sculpture and not to painting, when it brings us into such difficulties and problems.

In the diagram on page 169 the reader will find an analysis of the practice of figure painting in chiaroscuro as it was followed by Masaccio and most of the painters of Central Italy after the beginning of the fifteenth century, with an explanation of the method of using this method with Palette 1, described on page 45. If we give up Palette 1 for Palette 10 described on page 53 we shall be doing exactly what so many of the painters of the Renaissance did when they preferred to follow the law of pigments, even at a sacrifice of truth in the effect.

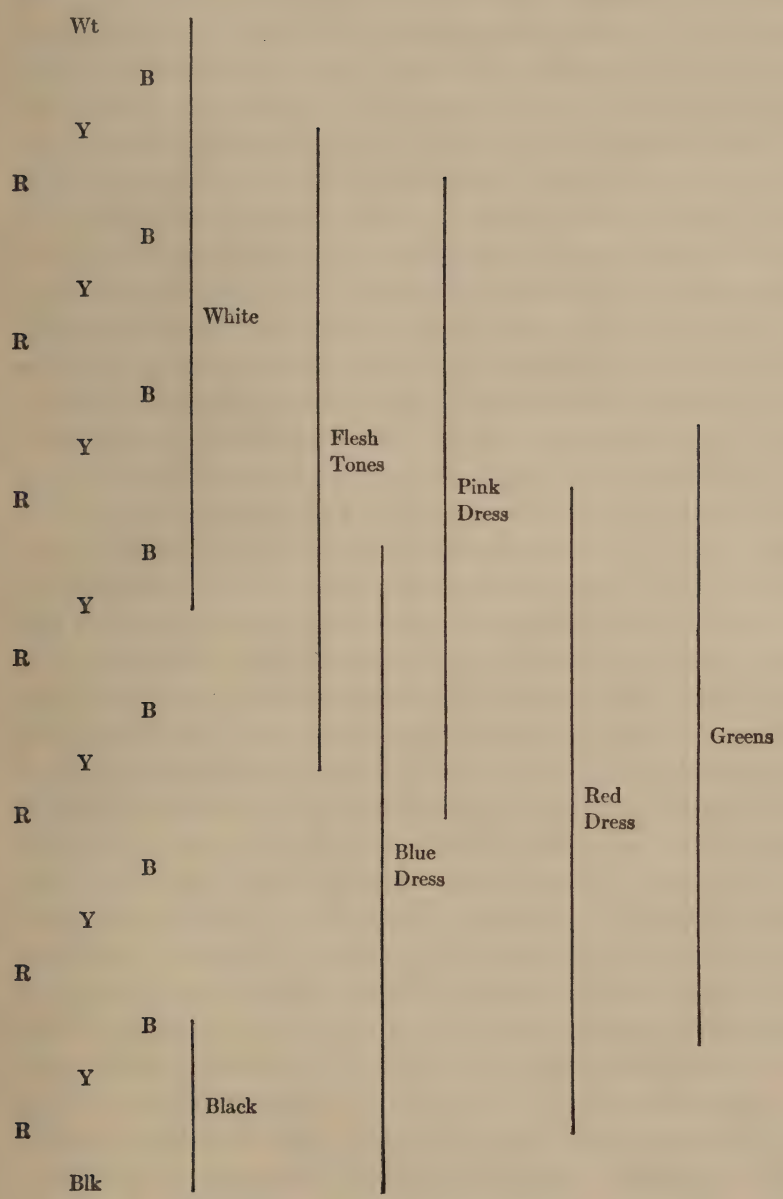
We have in Michelangelo and Raffael the terminal figures of this second development of the Art. Beginning in the inspiration of Masaccio it produced a long series of important masterpieces.

C. Form in Color-Values

Form and color were expressed in the mode of chiaroscuro from the time of Masaccio to the time of Michelangelo and Raffael. Then we come to another development of the Art, which is its final development. Form was at first suggested but not expressed. Then came the expression of form in light. Following that we have the expression of form in light and shade. There is one more mode of expressing it and one more point of view to be considered. Living far north in a country of less light and more darkness, the early Flemish painters conceived form as existing in darkness and coming out of darkness into light, where there was any light. The idea of the painter was to draw the object and then to show by painting whether it was in the dark or in the light, and how much in the light. That means that the number of planes in the modelling is determined by black, representing darkness, and the range

FORM IN CHIAROSCURO

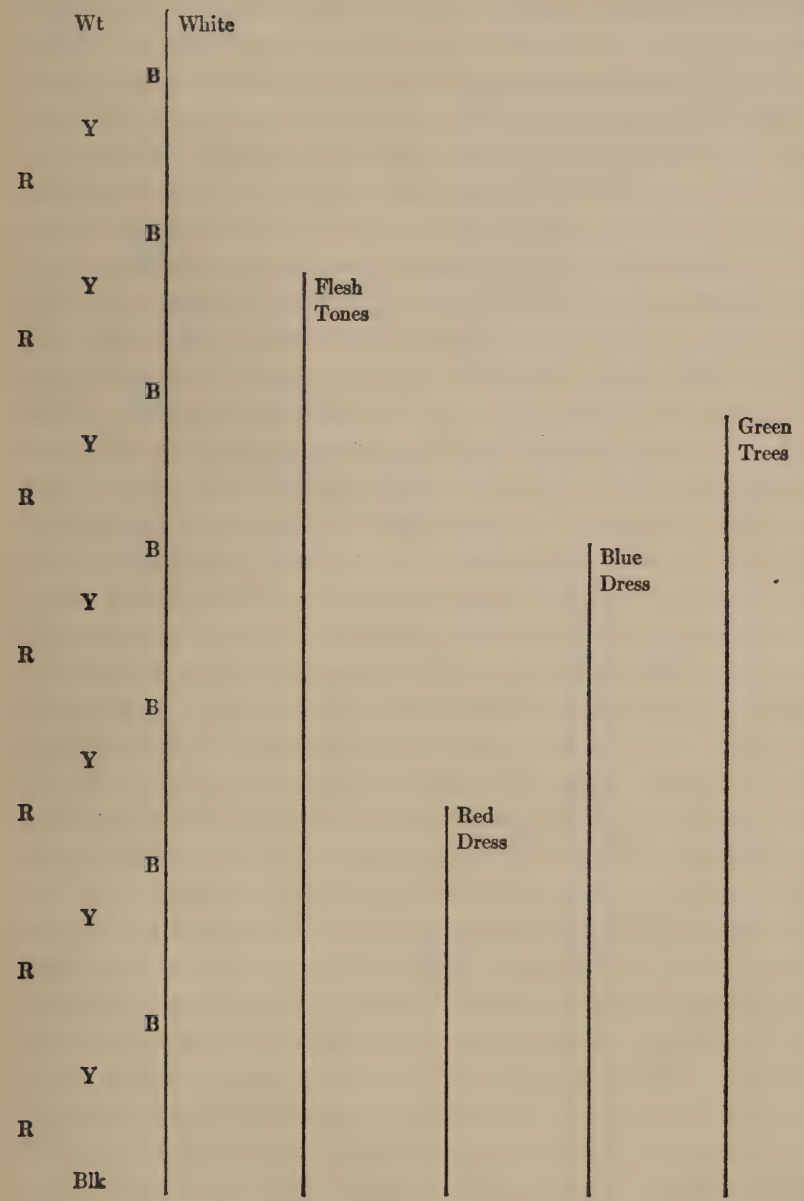
PALETTE 1



of values between black and the color of the object in light or in half light or in shadow wherever the painter wanted it to be. This idea of painting was first followed by the early Flemish painters, by the Van Eycks and their followers. The idea passed from the Low Countries into Italy and was followed by the Venetian painters without hesitation or particular consideration. They adopted the new idea, in all probability, without recognising it as a new idea. The difference of effect between chiaroscuro painting and painting in color-values is very slight. It is easy to mistake one for the other, but the difference is a real difference which should be understood. In painting in chiaroscuro the pitch of our modelling is where we please to put it. The two or the five planes of it can be pushed up towards white or down towards black or left in the middle between these extremes. In color-value painting the modelling begins with black, and from black it goes up to a range of one plane or two or more planes, as the case may be. The diagram on page 171 explains this. If the reader will compare the analysis given in this diagram with the analysis given in the diagram on page 165 and the diagram on page 169, he will see that the passage from the first to the second mode and from the second to the third mode of form-modelling was a perfectly logical one. Giotto leads the first movement, Masaccio the second, Jan Van Eyck the third. I find in certain pictures of Jan Van Eyck the initial masterpieces of the art of painting in color-values. The great altarpiece in the Museum at Bruges is one of them. The picture of Arnolfini and his wife in the National Gallery is another. From this beginning we pass through a wonderful series of pictures: Flemish, Venetian, Spanish, later Flemish, Dutch, French, English and American. The exquisite perfection which we see in the works of Van Eyck we see once more in the works of Vermeer of Delft, and very rarely after that. Correggio, Giorgione, Titian, Veronese, Tintoretto and Tiepolo are the great Venetians who illustrate the mode. In Spain we have Velasquez. In Flanders we have Rubens and Van Dyck: in Holland, Vermeer,

FORM IN COLOR-VALUES

PALETTE 1



Rembrandt and Hals: in France, Watteau, Fragonard, Corot, Manet, Degas: in England Reynolds, Gainsboro, Wilson and Turner: in America Copley, Stuart, Whistler and Sargent.

The Venetians, lovers of color as they were, put the plane of the light just where the local color of the object looked best. They put their flesh tones, in the most becoming light; the yellows, the reds and the blues, and other colors, where they were most beautiful. They lighted up the shadows as much as they pleased so as to get color into them, keeping them away from black and reducing the darks in which color disappears to a few small areas. That was the practice of Gentile and Giovanni Bellini, of Titian, in his early work, and of Veronese. All these masters being lovers of color kept the objects which they painted as much out of darkness as possible. They pulled the objects which they were painting into the light or pushed them out of it, into the half light or into the shadow, just as they pleased. Understanding Nature in her underlying principles they did what Nature does and gave us the truth of light and color in compositions and effects which are not at all realistic. The picture was in all cases a creation of the visual imagination and the visual discrimination of the painter. It was never an imitation of Nature. Tintoretto, loving color less and light more, took pleasure in darkness as the foil of light, just as Rembrandt did. The difference between Veronese and Tintoretto finds a parallel in the difference between Rubens and Rembrandt. The Spanish painters of the School of Seville were also lovers of darkness as the foil of light. Velasquez in his early work gives us much darkness and very little light. When Velasquez returned from Italy, after seeing the work of the great Venetians, he diminished the extent of darkness in his pictures and increased the extent of light and color. Following the example of the Venetians he put his colors in the planes of light in which they show best. The modern painter, imitating instead of creating values, is constantly trying to get strong colors into them when strong colors are impossible. The modern land-

scape painter, for example, seeing the sunlight on the green grass and the trees, establishes a value for them in which anything like pure green is impossible. The only greens which can be put into such high values are greens much neutralized by white. The masters of the Renaissance argued that green comes best, most truly and beautifully, in a certain value, and they put in it that value, the value of Low Light, approximately, pushing the grass and the trees out of the light into the range of half light or into the range of shadow and then pushing down the half tones and shadow tones towards black. In that way the coloring of their pictures was made true and beautiful without any loss of form in the light. The loss of form in the shadow, if it be a dark shadow, is not much felt. It follows that there is little or no correspondence between the general effect of the pictures painted during the period of the Renaissance and the effect of the corresponding scene in Nature. The truth both of form and color is told, but sunlight is not expressed. We are not supposed to express sunlight, when our highest light in painting is white paint, to be seen in shadow, if not in darkness and all our colors exist in a relative darkness. The landscape painters will do well to study the landscapes of Rubens and that masterpiece by Vermeer which is in the Museum of the Hague.

There are two points of view to be taken in the matter of coloring: shall we imitate the local coloring of the objects we undertake to represent, having the highest intensity of color in the plane of the light and seeing that the color diminishes in its intensity and disappears properly in darkness, or shall we try to produce our modelling in gradations of color which will enable us to get as many colors as possible into the values of their highest intensities and in those intensities, with the idea of producing effects of light, not by values but by colors? In other words shall we produce color in the terms of light or light in the terms of color? Using Palette 9, of a neutral and three colors on page 53, we shall reproduce local colorings in different planes of light. That is to say, we shall express

color in the terms of light. Using Palette 10, shown alongside of 9, on page 53, the palette which I devised in view of an analysis of the paintings of Rubens, we shall produce an effect of light in the terms of color. We shall do that also in using some of the forty-eight palettes of twelve colors in twelve values, given at the end of the book. I say "some of them," because most of them are adapted only for the practice of Pure Design.

Among the old Masters I think of three particularly who have given us light in the terms of color, Correggio, Rubens and Turner. Turner, though modern, belongs distinctly to the tradition of the old Masters. Among the modern painters I think particularly of Claude Monet, of Renoir, of Cheret and of Dodge Macknight. The problem of producing the truth of form and the truth of light in the terms of color is a very interesting one. It is a difficult problem and is very far from being solved. It suggests wonderful possibilities and we must try to realize them. The idea of most painters is that colors must be produced upon a basis of values but it is possible that values ought to be produced upon a basis of colors. The painter almost inevitably proceeds upon this second idea whether he believes in it or not. He puts out on his palette certain colors and produces his values and color effects in terms of color. He rarely paints in terms of black and white before proceeding to his coloring. He regards the colors on his palette as the means of expression. If they are the means of expression they ought to be much more carefully considered than they are by most painters. The palette should be set with the greatest care, as it was by the old masters.

The evidence for my statement that the old masters used set-palettes is found, as I have already explained it, first in the description by Cennino Cennini and early writers of the preparations necessary for painting, the preparation of tones in gradations, the placing of the tones in jars and the jars in an order corresponding with that of the planes of light in which the forms were to be expressed. After that we have little or no

reference to these preparations. There is no evidence, then, that the later masters used set-palettes? On the contrary the evidence that they used them is perfectly conclusive. Each master had a certain way of painting, a way from which he did not depart. Among other things, we notice in the paintings of each master that the same tones recur again and again in the same planes of light and the same tonality recurs in different pictures. That means the use of a set-palette. If there is no other evidence, that is sufficient evidence. It is conceivable, of course, that Rubens painted with a palette set out with certain pigments, that the tones we see in his pictures were produced by mixing these pigments according to well understood recipes or rules, but I think it more likely that the tones which we see recurring, over and over again, in his pictures were prepared beforehand and set on the palette and then taken from the palette as they were required. As I have said, the set-palette is for the painter what the instrument, the piano, for example, with its keys and harmonies, is for the Musician. No painter who has ever used a set palette and knows how to use it will ever give it up.

V. THE EXPRESSION OF FORM BY DRAWING

There are three types of drawing without coloring which connect with the three modes of painting, drawing with coloring, which I have just described. There is, first, — the drawing of form in light; second, — the drawing of form in light and shade or in chiaroscuro; and third, — the drawing of form in color-values. The first and second of these modes were used by the old masters. The third mode is relatively modern. It was very little used by the old masters and is rarely used now, except in the Schools of Drawing and Painting.

A. The Drawing of Form in Light

Following the practice of the early Florentine Masters, as we see it in their drawings, we establish a tone to represent the plane of the light. This tone, in the Florentine drawings, is

generally a light neutral gray or a light orange pink representing flesh-color. These tones were generally produced by water color washes and they represent the plane of the light. For the plane of higher light touches of white, either of water color or of chalk, were used and for the plane of lower light a shading of silver point was used. We have an equivalent of the silver point in a lead pencil of the quality H. The modelling proceeded upon the idea of three planes and a low relief. Theoretically seven planes were thought of and sometimes suggested; but they were never strictly achieved as the relief was kept low in this type of drawing. The value of the tone representing the plane of the light was not necessarily the value of the color of the object as seen in the light. The draughtsman had an indication in his drawing of the three planes of the modelling in their positions, measures and shapes. That was all he wanted. The same three values were used to describe all objects whether they were light or dark in color. The modelling of a white drapery, of flesh or of a dark red or dark blue drapery was accomplished in the same three values. The only suggestion of color-value is seen in the modelling of flesh when an orange pink paper is used for the plane of the light.

There are many drawings in the Uffizi Collection in which the forms are modelled in light without shadows. There are fine examples by the Pollajuoli, by Botticelli, by Filippino Lippi and Lorenzo di Credi. If the student cannot see these drawings he should get photographs of them and study the photographs. Copying them is the best way of studying them.

B. Form-Drawing in Chiaroscuro

In Form-Drawing in Chiaroscuro the parts in light are separated from the parts in shadow and then, if the drawing is carried further, the half tones, high lights and extreme darks are introduced, in their several positions, measures and shapes. In drawing in chiaroscuro it is not necessary that the tone in the plane of light should represent the color-value of the object

though it often does so. The modelling may be achieved in any sequence of two or five values of the Scale of Values. It may be pitched high or low, or it may lie in the middle range of the Scale, regardless of the color of the object which is represented, whether it be light or dark. The idea is to distinguish the planes of the modelling and to show their positions, measures and shapes. If the modelling is to be in low relief, as it may be, only two planes are distinguished, — one representing the light, the other the shadow, and the contrast between the two planes is slight. This low relief modelling in chiaroscuro is illustrated in some of the paintings of Paolo Uccello and Piero della Francesca, where the modelling is achieved almost in the value of the color of the object, the plane of the light and the plane of the shadow being very close together. In that way we get a modelling in light and shade which produces almost no effect of light and shade. The painting of Piero della Francesca is often as flat in its effect as the painting of the earlier masters who thought of form only in light and modelled it only in light. There are passages of modelling in light and shade in Piero's frescoes at Arezzo which are almost as flat as if they were not modelled at all, the plane of the light is so very nearly in the same value as the plane of the shadow. The effect is almost that of Chinese and Japanese painting in outlines and flat tones. It appears, therefore, that the shadows, in drawing and painting in light and shade or chiaroscuro, are not necessarily dark. When the modelling is flat and the effect is of low relief, cast shadows may be introduced or not, according to the pleasure of the painter. The question is, does he need them for the expression of his idea. As the modelling becomes less flat and more realistic in its effect, the need of cast shadows will be felt, unmistakably, and they should be introduced. The picture must not be real in one part and unreal in another. The low relief modelling in light and shade which we see in the painting of Piero della Francesca is very wonderful in its effect. We should certainly experiment in this direction, for it gives us a chance of form modelling in light and shade with

almost no loss of color in the shadows. My own feeling is that it is a solution of what has seemed to the modern painter an insuperable difficulty.

C. Form-Drawing in Color-Values

In Color-Value Drawing the tone established in the plane of the light represents the value of the color of the object as seen in light, and the modelling is achieved between that value and black, black representing not only the color black but total darkness. The value of black in light is black. Logically black can have no shadows; only high lights when the surface is one that reflects light. Black velvet shows no high lights but we have them on the light-reflecting surface of black silk. The masters of the Renaissance did not, to any extent, make drawings in color-values. There are a few drawings and etchings of Dürer and of Rembrandt in the mode of color-values. The beginning of color-value drawing may be traced to them, perhaps; but more clearly to the practice of reproducing portraits and other pictures by the process of engraving. The best examples of color-value drawing we have are, perhaps, the mezzotint engravings of portraits and pictures of the English School. Turner used this mode in his Liber Studiorum, very successfully. The mode is followed, as a rule, in the Schools of Drawing and Painting, in the figure-drawing in black and white; but not consistently followed. The drawing in the Schools is for the most part a very unsatisfactory compromise between drawing in chiaroscuro and drawing in color-values. It is neither one thing nor the other. The difference between the two modes is not explained by the teachers, nor understood by their pupils. There is a Chinese saying that "untaught persons never know the proprieties."

We have an equivalent of color-value drawing in photographs when they are properly taken and properly printed. We see, in photographs, objects, people and things emerging out of darkness into different planes of light, as in Nature.

VI. ON PAINTING PICTURES

The expression of form in chiaroscuro and in color-values, is almost beyond the possibilities of imaginative painting, unless the form which is to be expressed is very simple and well understood, as it is in cubes, in round balls and other geometric solids. The representation of the human form and of the forms of clothing or of drapery is very difficult if not impossible for the imagination. It is hard enough to recollect the contours. We do well if we do that. It is almost, if not quite, impossible to recollect, also, all the ups and downs and ins and outs of the surface. We may be able to distinguish the two principal planes, the plane of the light and the plane of the shadow, but we hesitate and get into difficulties when we go further and try to imagine the positions, measures and shapes of the half tones, the high lights and the extreme darks. It is necessary, therefore, to make drawings and studies from Nature to which we can refer when it comes to the painting of our pictures. If we don't do that we must paint the pictures directly from Nature. The old masters used drawings, invariably, because their compositions were imaginative. As we have given up imaginative composition we naturally prefer to paint directly from Nature. In doing that, however, we must understand that we are limiting the practice of painting to the representation of still life. It is only still life that can be painted when we paint pictures from Nature. We must be able to look at and study the subject for hours at a time. It follows that Nature and Life are for the most part unpaintable. The old masters drew imaginatively what they wanted to paint. Then they turned to Nature to study the subject and to get the knowledge required to carry out the idea. They did this even in portraiture. They made drawings, studies and sketches for the several parts of the composition, and referred to them when it came to painting the picture. They used themselves constantly as models, as they saw themselves in a mirror or two mirrors. When necessary, they got models and made drawings from them. In portraiture they used the

people whose portraits they were to paint who were put into preconceived pictures. In that way they got the facts, the information, the knowledge that was required. Then they painted the picture, taking plenty of time and doing it as well as possible. It seems to me that this is the proper method of painting pictures, unless we are prepared and willing to restrict the practice of painting to the representation of still life. The modern painter has given up making preliminary studies. He poses his model and sets up his canvas and proceeds at once to paint his picture. The model gets tired, and does not pose well and the folds of the clothes and draperies are all the time changing; so the painter has to paint in a great hurry and excitement. His painting is for the most part rapid sketching. As a rule he makes a sketch the first day. The next day he makes another on the top of the first, then another on top of the second, and so on until he is satisfied that he has done as well as possible under the circumstances. He appreciates the difficulty of the circumstances. If he is a very clever painter he paints his picture right off at once and does not touch it again, and it may be a masterly sketch that he produces. Most painters, however, have to work over the first sketch again and again. As they go on painting the paint piles up on the canvas but not evenly. It is thin in some places, and thick in others. The result is a most disagreeable surface to look at and a picture that is not going to last. The surface will crack. The colors will change. All sorts of things will happen which should not, because the picture has not been properly painted.

Go to any exhibition of modern pictures and consider the surfaces of the pictures. See how very bad they are. Go into the Museums and look at the modern pictures which are ten years old and see how they are going to pieces and how queer the colors look. Then look at the pictures of the old masters, those which have not been repainted, if you can find any, and see how well they have lasted, for hundreds of years, in spite of neglect and the many accidents of time. They have lasted be-

cause they were properly painted. The old Masters made it a point to produce consistent and beautiful surfaces and lasting effects. It was an important part of the art. A sketch was a sketch. The picture was never a pile of sketches one on top of the other. Sketching is all right but let it be sketching. When the sketch is done and it is well done you have a work of art. Let it alone. Don't touch it again. If you see in your sketch a subject that interests you that you would like to consider seriously with the idea of painting a picture, keep the sketch as the first expression of your idea. Painting a picture means a process of painting. It means laying a ground tone and letting that dry. It means a first painting and a second and perhaps a third painting; all three paintings being planned in view of the result to be achieved. To paint a picture while the model waits, which will be a work of art, is impossible for most painters. It means doing the thing in an hour or two and doing it well in that time. Only the accomplished master can do that. It is worth while, too, to consider how much there is in Nature and Life that can never be painted by anybody in that way. Surely the art of painting is not an art of making clever sketches of still life. It is much more than that. The serious painter who loves good painting, who would like to paint like Jan Van Eyck or Vermeer of Delft, who would like to paint a picture like the "Danaë" of Correggio, the "Bacchus and Ariadne" of Titian, the "Lances" of Velasquez or any of the Gild Pictures of Hals must paint with premeditation, and with a profound knowledge and understanding of the art. The great masterpieces of the Middle Ages and the Renaissance were achieved by plans well made, by processes thoroughly considered and ably carried through. To produce such pictures we must give up at once the idea of painting them from Nature. We can make drawings, studies, and sketches from Nature. The old masters did that, constantly, but they did not paint their pictures from Nature.

The modern painter thinks, if he paints a lady in simple old-fashioned clothes, sitting by a table in a strong side light, with

a piece of Chinese porcelain on the table, and a white wall behind, that he is painting like Vermeer of Delft, just because he has taken Vermeer's subject and, approximately, his composition. Getting a suitable model, in suitable clothes, and posing the model in a suitable situation and in a suitable light, he sets up his canvas and goes to work, imitating and reproducing his impressions. He does it very well, perhaps, the first day. His first sketch may be a masterpiece of sketching; but as the sketching goes on day after day the picture becomes worse and worse as a piece of painting until it is nothing but a subject, a composition and some drawing. Sketching in the subject and then sketching it again and again, on the same canvas, and doing that for a week or two or a month or two does not produce a Vermeer. The rich collector who collects pictures but knows nothing about painting is delighted, perhaps, to buy for two or three thousand dollars what looks to him just like a Vermeer, when the real one would cost a hundred thousand dollars or more. He does not know that the difference of cost corresponds very closely with the difference of value.

If the reader wishes to understand this difference between a pile of sketches one on top of another and a well painted picture he should consider one of the modern " Vermeers " and study it technically, as a technical performance. He must ignore the subject of the picture. He must not think, at all, of that. The composition is probably good as it is based on a very good precedent. Vermeer is a great master. It is a question, then, of drawing, of tone-relations and of surface. The drawing may or may not be good. It is often bad. Then it comes down to a question of tone-relations and surface. Do the lines and spots of paint hold their places? Do they stay just where they belong? Are the several objects represented self-consistent in their coloring? Is the surface even and beautiful? If the white wall does not stay in its place, if it goes in and out like a white sheet blown by the wind, it is badly painted. If the front leg of the chair, which stands against the

wall, appears to be beyond the wall while the back of the chair is this side of it, the picture is badly painted. If the color of the lady's dress changes in any plane of the modelling and is one color here and another color there, the plane being the same plane, the light being the same light, the picture is badly painted; unless the dress is like Joseph's coat, of many colors. These are the things which the collector of pictures, who knows nothing about painting, never sees. They are only grammatical errors, perhaps, but no painter who understands his art, who paints in a proper method, ever commits them. Having no method the modern painter makes these mistakes constantly. When he makes them he does not know what to do to correct them. He tries to correct them according to his impressions but fails. In the mean time the surface of his painting gets worse and worse. It is under these conditions that the painter decides that he will paint without thinking about it and take the consequences. His painting then expresses among other things his thoughtlessness about painting and the full extent of his inspiration. The art of Vermeer will never be reached by any kind of sketching in imitation of visual impressions. There is nothing in the world more deliberate, more thoroughly considered, more intelligent, less spontaneous. It is a case of the master who produces his masterpiece because he understands his art and obeys its laws.

Rodin, the sculptor, speaking upon this subject, says of "inspiration": "It is an old romantic idea which is devoid of any meaning. According to that old idea a youth of twenty is smitten with an inspiration to create a marble statue, to build it out of the delirium of his imagination. That is nonsense. Artists do not love their work if they do not understand it. All that is done in haste, in a state of excessive exaltation should be destroyed. Genius is order personified, the concentration of the abilities and level-mindedness of the masses. My work has often been styled the product of inspiration and exalted enthusiasm. I am just the opposite of an

enthusiast. My temperament is even. I am not a dreamer. I am rather a mathematician. My sculpture is good because it is geometrically correct. I do not deny that I am emotional in my work but that is only because my emotion is aroused by the beauties of Nature which I am reproducing." [1] Paolo Ucello, Piero della Francesca, Mantegna, Jan Van Eyck and Vermeer of Delft are mathematicians in the art of painting. Every picture was a scientific problem and the solution of the problem which we have in it is a triumph of Science quite as much as it is a triumph of Art. All the great masterpieces of painting have been produced in this way through a scientific understanding of materials and processes, and this understanding never in any degree interferes with the love of Nature with which we proceed to the undertakings of Art.

The Use of Photographs

The modern painter has in photography an aid to study, which the old masters did not have. They had only their drawings, studies and sketches to refer to. We have photographs also which, if properly used, ought to mean for the modern painter more knowledge of Nature than any painters have ever had.

It is easy for the student to waste a lot of time studying books of Anatomy and trying to remember the names of bones and muscles, as if he were going to talk about them instead of drawing them. If the time spent on books of Anatomy were spent in drawing from photographs of the figure in its different attitudes and movements until these attitudes are well understood and can be recollected in the terms of vision the student would have his Anatomy in a form available for his purposes. He could not talk about it but he could draw it and that is what he wants to do. Drawing from life is far more interesting and exciting than drawing from photographs but models are difficult to get and expensive and I am sure that one can become an able draughtsman using photographs

[1] Interview published in the *Boston Sunday Herald*, July 21, 1912.

and drawing from them in tracing-size, always following the eye, and avoiding all mechanical methods.

If we are going to paint life as we see it, not still life in the studio, but the real life of the outside world, which is certainly not still life, the camera will be found indispensable as a source of knowledge and information. It will be a record of certain facts and a record which may be referred to at any time, as the facts may be required. When the painter has in a photograph the facts he wants he should draw from the photograph until he knows the facts visually and can recollect them visually. In order to get the facts clearly in mind he must, however, when he draws from the photograph draw always in tracing size. It is only when he draws in that size or scale that he gets his knowledge in the form of visual images and available for his purposes. If the photograph he is drawing is very small, an enlargement should be made. He can have the photograph and his drawing at the same distance from the eye, in which case the drawing is in the scale of the photograph, or he can have the photograph further off and make a drawing which will be smaller in scale than the photograph. Having a small photograph he can hold it close to the eye and with his paper at a distance he can draw the subject larger in scale than it comes in the photograph.

It is only a very small part of Nature and Life that can be pulled into a studio and made available for drawing and painting and it is difficult, drawing and painting in the studio, to get the model to be still, unless the pose is a very easy one. Many interesting poses are impossible to hold or to recover when they are lost. Children are particularly troublesome, as everybody knows who has tried to draw them. They are so attractive and so impossible. Then there is the difficulty of clothes. The folds and creases are constantly changing and they have to be drawn and painted between rests, to be painted at all. How foolish not to allow the camera to give us a record, at least for what cannot be drawn except in a great hurry and unsatisfactorily.

Having a good model for two or three hours the painter will be able to try a number and variety of attitudes or poses. He can look at each pose from different points of view. He can make changes in the lighting, trying the pose in a widely diffused light, in a less diffused light, in a somewhat concentrated light, in a very much concentrated light, in strong light or in feeble light. By using a mirror and looking at the model in it he is able to get another and different range of effects. He may use the mirror as a reflector of the subject, or as a reflector of light, to diminish the depth of his shadows or to eliminate them altogether. He is able by using opposite lights, whether of windows or of mirrors, to get endless interesting effects of cross-lighting. He is never obliged to take the light from the window, where it is. By means of a mirror he can get his window where he wants it; and the light may then be modified, indefinitely, by means of shutters and white curtains more or less transparent. Studying the model in this way in different attitudes, in different effects of light, and taking photographs of the effects which he considers particularly significant or beautiful, the painter makes his camera a means of recording and developing a range of ideas which would be impossible if he had to stop to draw every effect that interested him. By means of photography he is able to compare attitudes and effects of light, which he could not possibly compare if he had to remember them. He could not remember them.

The camera is not only a means of record and comparison but a means of expression which the painter cannot afford to disregard. The painter should make it his business to take photographs of all the subjects that interest him and as many of each subject as possible. He should try particularly to get into his photographs the facts which connect with his ideas, the ideas which he is going to express in his pictures. He must illustrate in the photographs he takes his interests and his ideas so far as he can do it, and he will find that he can do it to a surprising extent, without drawing or painting at all. He

has in the photograph he takes his choice of subject, his choice of the moment when the subject is most interesting or significant, when the composition is the finest, the effect of light most beautiful, when the expression of the head or the body is just what he wanted, looked for and at last secured. Then in printing and cutting his photograph the painter may change the composition and create a relation of tones, measures and shapes which will express fairly well, perhaps, his idea of order and beauty in Design. There is an art in photography which the painter who has definite interests and understands design is particularly well prepared to practice. We should not hesitate in preferring the photographs which some people take to the pictures of painters who paint without discrimination and without judgment and in ignorance of the art which they practice.

It is not proposed, of course, that the painter should give up the practice of drawing and painting from Nature and turn to photography. On the contrary he should draw and paint from Nature constantly, but when he draws and paints from Nature he is expected to do so, not without art but with art. The painters who, following the practice of the Schools, produce indiscriminate and artless imitations of objects, people and things find in the camera a very formidable rival. The camera has driven these painters to the last trench. They still hold that color is something which is impossible to the camera. We often wish that it were impossible to painting, it is so bad when imitated and not created. The school-bred painters simply loathe the photograph and despise any painter who admits that he ever uses it. Many of them use it, nevertheless, but they are inclined to use it on the sly, making no acknowledgement of indebtedness. When we have made up our minds to give up our artless imitation of objects and begin to practice painting as an art of Design, as a Fine Art, the camera will no longer appear as a rival, to be suppressed, but as an indispensable aid and means of study. We shall go to our photographs as we go to our dictionaries, encyclopedias and

other books of reference to make sure of certain facts which we want for the development and expression of our ideas. That we should hesitate to use photographs in this way, as books of reference is absurd. The time will come, I am sure, when every painter will have a collection of photographs to refer to just as every writer has a library. We are not expected to copy the photographs and offer the copies to the public any more than we are expected to offer the public what we find in our books. The information we get, whether from books or from photographs, must be brought into the form of an idea and expressed in that form, always. When the portrait painter tells us that he is being cut out of his business by the photographer, that if the artist is to survive the photographer must be suppressed, we must urge the portrait painter to give up the competition. When it comes to statistical imitation the camera beats the painter every time. The painter must give up painting photographic portraits and do as the old masters did. He must discover and invent a design orderly and beautiful, and introduce into it the distinctive characteristics of the sitter. We shall then have, instead of an imitation of the accidents of vision, a selection of essential facts formulated in a composition mainly imaginative and expressing the discernment and good taste of the painter, his love not only of Truth but of Order and Beauty in all things. As long as he persists in trying to do what the mirror does, what the camera does, no matter how hard he works he finds in the mirror and in the photograph something infinitely beyond what he can do doing his very best. Nature is inimitable. What we must do, so far as we can do it, is not to imitate Nature in her effects which are inimitable but to follow her in her eternal causes, principles and laws. It is only as we follow Nature, with an understanding of causes, of principles and of laws, that we can hope to produce results at all comparable with hers. The painter must be first of all a lover and seeker of knowledge. The knowledge he wants, being a painter, is a knowledge of the world of vision and of the visual

imagination including a knowledge of the art of painting as it has been practiced by the masters. Without a knowledge of his art the painter will be unable to express himself. The more he knows of the world of vision and of the imagination the more necessary it is that he should understand his art. To express knowledge without art is impossible. Seeking the knowledge that he wants and requires he proceeds always in the spirit of learning and follows the methods of learning which are the methods of Science. He follows the method of the hypothesis with a verification or modification of it in specific experience and experiments. He conducts his experiments with lines and spots of paint as the causes producing the phenomena in which he is interested. His studio is his laboratory in which he tries his experiments. In all his experiments he is endeavouring to reproduce the phenomena of vision, the phenomena of light and color in Nature or in works of art. He follows Nature and at the same time the good precedents of his art which have become a part of Nature. He does not try to distinguish between the flower which is produced by the plant, between the plant which is produced by the soil, and the masterpiece produced by the master. The painter must study Nature always in the light of ideas — his own ideas and those of the masters. So he proceeds. He follows Nature and Art, which is the human part of Nature and never thinks of doing anything else. That is the proper life of the painter, and the works which he produces are the record of a life of scientific investigation and experimental practice. If the painter forgets the order and beauty of Nature we do not find it in his works. He must not forget the order and beauty of Nature. The truth of vision must be achieved in a form of order and beauty so that the whole truth may be expressed. The order and beauty of the performance is as much an imitation of Nature as the truth which is represented in it. The painter must imitate Nature in her processes as devotedly as he imitates her in her effects. In painting the buttercup he must

not forget how it has come to pass; so that the picture which he paints may represent not only the buttercup but the order and beauty of the universe in which it is only the very least little thing. It is impossible to draw the line between Science and Art. Science lies in the meaning, Art lies in the form of the meaning. Science without Art is meaning without expression and Art without Science is expression without meaning. Art and Science are thus inseparable. Working together they give us "the simple truth miscall'd Simplicity."[1]

[1] Shakespeare: Sonnet LXVI.

REPRESENTATION IN FORMS OF DESIGN

THE motive of Representation is to achieve the truth of Representation, and when we are thinking of this truth we must not think of anything else. At the same time it is very important that the truth we have to tell should be well told, in a form of expression that is orderly and if possible beautiful. We try, therefore, to tell the truth and at the same time to produce a work of art. That means that we proceed with a mixed motive and the result is a compromise, — something less than Truth for the sake of Art and something less than Art for the sake of Truth. Such a compromise is never satisfactory. We look for the Truth that is not told and we look for the Art that is not achieved. It is never safe to follow two motives at the same time. I remember a lady who, standing in a corridor and opening first one door and then another, was able to hear at the same time "two very interesting lectures." When we are painting in Design, therefore, we should think only of Design and when we are painting in Representation we should think only of Representation. That is a safe rule! It is possible, however, when we are painting in Design, that the knowledge of objects, people and things, if we have it, may come out of the region of subconsciousness to which it has been relegated and slip into our designing without our thinking about it, and when we are painting in Representation and are trying to get our knowledge of people and things into true ideas, the Love of Order and the Sense of Beauty, if we have them, may slip into our truth-telling without our being aware of it. There is no objection to that, of course. That is as it should be. The Love of Order and the Sense of Beauty will not, however, come out of our subconsciousness if they are not there. They must have been previously exercised and developed. We must have studied

fine examples of Design and particularly examples of Design as applied in Representation, and we must have had lots of practice in Design, particularly in connection with Representation, to achieve any excellence in Design, without thinking about it. We must have exercised ourselves particularly in following the two motives, the motive of Design and the motive of Representation, at the same time and quite consciously, trying to achieve in a single effort the Truth we want for Representation and the order and unity we want in Design. The results produced by this deliberate and conscious effort to think of two things at the same time, to achieve two ends in one, may not be at all interesting or valuable, but there need be no exhibition of such work. It may be destroyed as soon as it is done. It has served its purpose. It has been a means of training and it was undertaken with no other end in view. It was undertaken like a course in English Composition, to induce an ability to speak well and to write well without having to think about English Composition. In speaking and writing we want to be able to think of our subject, of the knowledge which we have of it and the ideas we want to express. We don't want to think of the alphabet, the dictionary, the grammar, or of any rules of Composition or Rhetoric. So in painting, we want to think of the Truth of Representation we have to express and not at all of Repetition, Sequence, or Balance, or of any other modes of Design. That is the end to be reached, of course, but it takes some time and lots of work to get there. We must begin, as I have said, with a simultaneous and perfectly conscious practice both of Representation and of Design, hoping that the time may come when our practice of Design will drop into the region of subconsciousness and we shall think no more about it. We must understand that it is only the accomplished master who proceeds in this simple and direct way. It is a reward which he earns by years of conscious effort and hard work. The beginner has to think of the idea and the form of expression as if they were two distinct things. Then he tries to get them together into one. It

is the master, only, who can think of them together in a single act of thinking. Even the master does not always succeed in doing that.

The painter in Representation who does not practice Design deliberately and consciously, until he knows the rules and the principles, the forms and the modes, by heart, will accomplish nothing. Design is exactly like a language. It must be thoroughly mastered before it can be properly used and it can never be properly used unless it is constantly used before it is thoroughly understood. No matter how considerable the natural talent or genius of the painter may be he cannot be a successful designer without a conscious effort and lots of practice.

Since the appreciation of Order in forms of expression is rapidly developed in some minds, very slowly, if at all, in others, we are apt to say of one person that he has a genius for design, of another that he is no designer at all. The explanation lies in the fact that one person acquires an interest in the art of expression and a delight in fine examples, while another is more interested in something else. Interested, for example, in the truth of representation and not at all in design, he is apt to despise the man who thinks of anything "so unimportant" as design. He prides himself, probably, upon his "simple truth-telling": but the chances are that his truth-telling is not simple. It is apt to be complicated, incomplete, and difficult to understand, because it is mixed up with things which are irrelevant and what is required to convey the meaning is so often left out. "The simple truth miscall'd simplicity" is achieved only by the accomplished designer who is at the same time a seeker after the Truth. I have proposed the practice of Design as a means of developing the Love of Consistency and Unity, of Order and Beauty. I propose it now for those who, being lovers of Knowledge and Truth, have occasion to express themselves, for without a knowledge of Design clear expression is impossible. The painter in Representation, proceeding without selection or discrimination, may be able to imitate and to reproduce the im-

pressions of vision fairly well, but that is not expression. It is straight imitation. The moment the painter begins to select and discriminate, when he begins to leave out what is irrelevant and to put in what is required to complete his idea he must have a knowledge of Design. He cannot get on without it. The knowledge of Design begins in an understanding of materials and processes: it proceeds in an intelligent practice of Repetition, Sequence and Balance. It ends in the love of Consistency and Unity, Order and Beauty; in truth-telling as well as in other things.

Drawing and Copying Pictures as a Means of Study

There is no more important means of study and training than will be found in copying the masterpieces of the art which we practice, but this copying must be done with the right motive and in the right way. When we are studying designs and pictures to get a technical understanding and thorough appreciation of them we must, certainly, make copies, if we have the opportunity to do so, but we must not make the copies in the usual way. We must formulate a theory as to how the picture we are copying was painted, and then we must paint it in that way, following our theory. What we have to do, if possible, is to discover how the picture was painted; what materials were used, what was done first and what afterwards, what the several stages of the performance were, leading to the result or effect. The work of art we are reproducing is a phenomenon to be scientifically explained. We want to discover if we can the cause or causes of it: then we want to reproduce it exactly as it was produced. Copying in this way we are not likely to reproduce the effect of the picture very closely, because our theory can never be quite correct nor our skill quite adequate, but we are sure to get a knowledge and the understanding which will help us in our practice. Copying in the usual way we should get a copy, nothing else. It is much more difficult, of course, to discover how the thing was done and to do it that way than to do it in our own way

painting as we are in the habit of painting, but our object is not to practice our own art but to practice, if we can, the art of a master, so that our own art may be improved and advanced. Copying in this way, following the performance of the master as nearly as possible, the student is sure to make discoveries of the greatest interest and, as he becomes a master, it is just conceivable that he may, on an occasion, go beyond the work he is reproducing and produce something better. He is putting himself, so far as he can, in the position of the master whose work he is studying, and as he does that he may possibly surpass the master, just as the master might have surpassed himself. It should be remembered that in the Far East this was the only way of learning to draw and paint; studying great masterpieces, trying to find out how they were done and reproducing them if possible as they were produced. Certain subjects were painted repeatedly, always in a certain method. From time to time, as great masters arose, precedents were surpassed and the art advanced. Under these strict limitations of a certain subject and a certain method very wonderful things were done. The little thing which makes perfection, which is not a little thing, was from time to time achieved. There was no distinction for those who missed it.

Another thing to do, quite worth while, is to take designs or pictures which have an interest but are not technically well done, and to reproduce them in a better form of the art. It is always a pity when good thought is lost because it is badly expressed. During the Middle Ages and the Renaissance it was the constant practice of the painters to take from one another what they liked and to incorporate it in their own work, thus realizing a higher and higher excellence and perfection in certain types, and keeping alive the art of the past by effecting a survival of every achievement and an elimination of all errors and defects. The idea was not only to do it again, whatever it was, but to do it better. As soon as a certain type of painting was invented the painters began to produce new examples of the type, differing one from another more or

less. The interest, the struggle, was then to achieve the highest excellence possible to the type. Sooner or later it was achieved.

The modern painter has given up copying and reproducing pictures. He does not believe in copying. He must be original. He must follow his own motives and express himself exclusively. He must avoid, so far as he can, doing anything that has already been done, even by himself. The public never wants to see the same thing twice, so the painter avoids repeating himself as much as possible. That means that nothing is well done, because nothing is well done until it has been done a great many times with an effort to do it better and better.

When I was a boy the painters were all the time making copies of drawings and pictures. They regarded it as an important and necessary part of their training. The copies were never properly made. The effort was to reproduce the effect of the drawing or picture, and the painter reproduced the effect in his own way of painting with no effort to understand the work he was copying technically. The practice was a mistaken one but the aim of it was all right. The painter thought he was properly studying the masterpieces of his art and he considered it the right thing to do. The painters have now decided that it is not necessary to study the masterpieces of painting particularly and that it is certainly a waste of time to copy them. They tell us that it is better to copy Nature; so they copy Nature. Nature, however, does not teach us how to paint, only painters do that, the painters who are masters of the art. In giving up the practice of making copies the modern painter has given up the best means of self-instruction that he has. He will never learn to paint by imitating Nature and ignoring Art, trying without Art to tell what he calls the "simple truth." The impressionist painter has the love of Truth, but having little or no knowledge of his Art he is never able to leave out anything that he sees or to add anything that he cannot see. He has forgotten that there is such a thing as the

imagination or, if he remembers it, he does not trust it. He certainly misses the "simple truth" he tries to tell.

There are a few general principles or rules of Design as applied in representation which need to be stated:

Consistency in Tone-Relations

Every picture should have the tonality of a single light, unless two or more lights are represented. That means that the picture should be painted with a set-palette and with a definite register system or systems. It is inconceivable that a perfect consistency in tone-relations should be attained by any other means.

Measure-Harmony

It is always worth while, when it is possible, that is to say when it is consistent with the truth which is to be told or the idea which is to be expressed, to get the objects represented into relation with a certain measure repeated, so that as we look at the different parts of the picture we feel one of it, two of it, or three of it and so get a feeling of Harmony without perhaps recognizing the cause. The cause of the Harmony, the repetition of a certain measure, may be almost, if not wholly, out of sight and our attention may be given to the representation, whatever it is; just as in Poetry we feel the measure of the verse though we are thinking only of what the poet is saying.

Shape-Harmony

For the sake of Harmony, it is often possible and worth while to draw your objects and figures with lines of a particular character; straight lines, angular lines, circular lines or elliptical lines, fine lines or coarse lines. The repetition of a certain kind of line in the drawing produces Harmony and is not, necessarily, inconsistent with the truth of representation, the truth you wish to tell. It is again putting your ideas into a metrical form, the meter being found, this time, in the shape of the line and in the recurrence of that shape as the eye

moves from one part of the composition to another. The painter must be very careful, however, not to fall into a mannerism which will interfere with the proper expression of his idea. He must not forget his idea and turn to an irrelevant practice of Pure Design. There should be no more repetition in tones, measures and shapes than is consistent with the subject which is represented and the idea which is expressed.

Sequence

It is very important to get sequence into the composition of the lines so that the eye passes easily along the contours of each object and from object to object, comprehending the several parts of the composition and the whole of it in a single movement or connection of movements. It is the purpose of the painter to make the visual comprehension of what he is representing as easy as possible to himself and others and he will find that his best means of doing this lies in the practice of linear sequence. It is often possible to throw a composition of several, even of many figures, into connection with a single line, not drawn, which will be felt without being seen. The sequences I am speaking of will be sequences of continuation or repetition. Sequences of gradation are also available, as a means of drawing the eye from one part of the composition to another. The eye moves on gradations as easily as it moves along lines. The regular alternations which give us the feeling of Rhythm are not, as a rule, appropriate in Representation. They are too regular to be consistent with the representation of what is seen in Nature at a certain place and at a certain moment.

Balance

The principle of Balance, also, must be kept in mind. The obvious balance of symmetry on vertical axes is seldom required in Representation unless it comes in the object or objects represented. The less obvious forms of balance are those which we generally use in Representation. It is always worth

while, if possible, to get all the attractions of a picture to balance as attractions at the center of it or at least at some point on the central vertical axis which marks the center of the field of vision when we are looking at the picture. That does not mean that the object of most interest in the picture must be set on the central axis though it is very often set there. It may be set altogether on one side of the center. Nevertheless it is worth while to have the eye of the beholder held at the center of the composition because it is the center. If there is nothing on the other side that you want the beholder to see or feel, cut out the other side. It must be remembered, however, that a large empty space is often as much of an attraction for the eye as a space full of objects, with details of drawing and contrasts of tone. The eye is, as we all know, constantly pulled away from fullness to emptiness and is often held in the emptiness as in a black frame with white paper in it. Another form of Balance which must be remembered constantly by the painter in representation is that of a stable equilibrium of all inclinations to fall to the right or the left. The composition must be able to stand on its bottom, so to speak. There must not be anything in it which will give the beholder the idea that it is going to fall one way or the other. Inclinations to the right must be counteracted by inclinations to the left unless unstable equilibrium is required, as it may be, to suggest motion in the object represented. I have already explained, in describing the practice of Pure Design, how an inclination or inclinations one way may be balanced by an attraction or attractions on the other side provided the attraction or attractions are in the right places. The student should look at pictures with this idea of stable equilibrium in mind and when he sees a picture which he feels to be perfectly stable in composition he should analyze it and try to discover the causes of its stability. When he sees a composition with a tendency to fall over to the right or left he must try to think what might be done to hold it up. The student may in this way exercise and develop the sense of equilibrium until he becomes so sen-

sitive that when any one of his own compositions is in the least degree inclining one way or another his imagination will at once suggest what to do and he will do it instinctively. There are no exercises more important for the student of Design as applied in Representation than those which will enable him to recognize stability in pictures and to notice the absence of it when it does not exist.

Consistency of Mode

Every picture, every drawing, every painting should be consistently in one or another of the modes of the art which I have described. The limitations of each mode being understood the truth of representation is subject to these limitations. We do not expect the truth of tone relations in outline drawings, nor the truth of form in connection with outlines and flat tones, nor the truth of light and shade in the representation of form in light. When we choose our mode we must do so with a clear understanding of its limitations and possibilities and when we look at pictures we must recognize what the mode of expression is and refrain from criticisms which call for another mode. Again it is the principle of Repetition which we follow. If we begin in the mode of Outlines and Flat Tones we must continue in that mode. If we begin in the mode of Chiaroscuro we must continue in it. There must, in other words, be a repetition of one mode in every part of the composition.

The Law of Specification

The Representation, whatever it is, must be achieved in a certain degree of specification. The picture must not be abstract or general in one part and particular and statistical in another. A certain measure of specification being established there must be a repetition of that measure in every part of the composition, for the sake of Harmony. We may be as abstract and general in our statement as we please, or as specific and particular, but we must not be general in one part

and particular in another; unless, of course, we are representing an effect of different distances when the degree of specification must be appropriate to the distance of the object. In that case it is important that the composition should be conceived in definite planes of distance and definite degrees of specification so that the mind shall not be confused by the suggestion of numberless differences and varieties. The old masters thought of three planes of distance; the foreground, the middle distance and the background. In the foreground we have, of course, the highest degree of specification. If the statement in the foreground is abstract and general the statement in the middle distance must be more so and in the far distance most so.

Technical Perfection as an Imitation of Nature

The painter must not forget that in following Nature he must not only achieve the truth of representation in a good form of Design but he must achieve in his performance something of the technical perfection which he sees in the works of Nature. The painter should feel in drawing any natural object, or in painting it, as if he were creating it. In doing his work skillfully, in achieving excellence and perfection in it, the painter is imitating Nature quite as much as in achieving the truth of appearances. The act of creation is quite as interesting and inspiring as the objects and effects created. To despise technical skill and to admire in pictures only the truth of representation means that you appreciate only the results and effects of creation and fail to appreciate the act which is the most wonderful thing about it.

Expression must be Appropriate

The Composition should be appropriate to the idea expressed in it.

This is the most important of all the principles and rules of Design. In a way it comprehends them all and sums them up. If the composition is not in all respects and particulars appro-

priate to the idea we say that it is in no sense a repetition of the idea; that there is a want of Harmony between the thing thought of and the thing done. They have nothing in common. When we insist that the action shall be appropriate to the thought, the performance appropriate to the motive, we are insisting upon the principle of Repetition; of a correspondence as close as possible between the work of art as a form of expression and the idea which the artist wishes to express. When we think one thing and say another we are disobeying the most fundamental law of Art. This is well understood as a principle of Speaking and Writing, and as a principle of morality, but it is not so well understood as a principle to be followed in painting. The modern painter, painting from Nature chooses his subject, because it interests him. Then he puts up his canvas and proceeds to paint and paints everything in sight. That means that he paints many things that are irrelevant to his interest, his subject and his idea. He does not hold to his first very simple idea of the subject but takes it as it comes, just as he sees it, mixed up with other things he happens to see at the same time. He is as little discriminating as a mirror or a camera.

We are not obliged when we paint the portrait of a lady to paint also what we see behind her or alongside of her. We are not obliged to paint her red if she happens to be overheated. If the color of her dress is unbecoming we may change the color. We may change or leave out everything but the lady whose portrait we are painting. Look at the photographic portraits in our exhibitions and then look at the portraits of the great masters of the Renaissance and you will understand what I mean, — the difference between an indiscriminate imitation of Nature and the expression of an idea.

When you have painted a group of figures in sunlight with shadows and wish to have the group foiled and relieved by a half tone background you may, if you please, reduce the sky and the clouds from the plane of high light to the plane of half light giving the relativities of position, measure and shape

correctly in the lower plane. You do this for the sake of properly emphasizing the truth you wish to tell. This was done by the old masters as a matter of course; by Titian, in the Madonna of the Rabbit, in the Louvre, and in the Bacchus and Ariadne in the National Gallery. It was done again and again by Tintoretto, in the Saint George of the National Gallery, for example. It was done by Velasquez in the "Lances" at Madrid. It was done by Hals in the Gild pictures at Haarlem. Decide what you want to paint and don't paint anything else, and put the stress or emphasis where you want it. That is the rule to follow.

Facts have no value in themselves. They are valuable only in the light of ideas. I should hesitate to say anything so obvious and well understood if it were not for the prevailing practice of indiscriminate truth-telling, in which what is relevant is hopelessly mixed up with what is irrelevant. When you paint Heaven, leave out all the facts that belong to Hell. Then paint Hell, if you like, and leave out all the facts that belong to Heaven. In that way the facts will come to mean something and we shall be helped and guided by them. The truth will be told, but not in one book or in one picture. It will be told in many books and many pictures, and to know it all we must read all the books and see all the pictures.

CONCLUSION

In conclusion, I want to warn the reader that I have written this book to express my idea. If there is any Truth in it, it is the truth of my idea. Almost every statement that I have made might be qualified out of existence by a statement of the facts on the other side which I have ignored, not always in ignorance of them. In presenting my particular point of view and my idea I am, no doubt, offering a partial and a one-sided statement. It does not interest me at all to take points of view that are not mine or to express ideas that are not mine, nor do I think that the reader wants me to do that. He wants to see me in my book; my likes and my dislikes, what I love and what I hate. Such a book is one-sided, of course, but it is interesting to write and may be interesting to read. It is only as the writer expresses himself in this way, exclusively, that he makes his ideas and ideals perfectly clear, and it is only as he does that, that he can hope to bring people into the interest which is his and to lead them to think and act as he wants them to think and act. It is only in this way that people are led and directed and controlled and governed. Nobody is ever controlled or governed by the whole truth, because it can never be presented in any statement which is not self-contradictory and self-annihilating. We are led not by all the facts but by some of them, not by all the ideals but by some ideals. To be led by all the ideals which are set before us means that we are not led at all, because we cannot move in opposite directions but only in one direction. Consider, for example, the ideals of Equality, Fraternity and Liberty as illustrated by so many interesting and impressive facts. Shall we be led by these ideals or shall we be led by the contrary ideals of Superiority, of Exclusive Devotions and Self-Sacrifice. Shall we seek liberty of action or shall we give up

all thought of liberty for the sake of some interest, some ideal by which we are possessed and controlled, some interest we want to follow, some particular work we want to do, some excellence and perfection we want to achieve, which is so important in our minds that Liberty seems as nothing in comparison, Fraternity an incessant and irritating interruption and interference, and Equality quite contemptible in view of the Superiority for which we are prepared to suffer everything. When I am talking about Superiority I will not talk about Equality and Fraternity: when I am talking about Self-Sacrifice I will not talk about Liberty. The reader may put down my book at any moment and begin to think of the ideas which I have not considered, the ideals which I have not expressed, the other side of the question which I have ignored. If the point of view I have taken irritates him, if he does not share my interests, if he does not believe in my ideas and ideals, he must shut the book at once and never open it again. He must leave it to those, if there be any, who find in it what they want and what they believe in. *Ex ingenio suo quisque demat vel addat fidem.*

THE FORTY-EIGHT PALETTES OF TWELVE COLORS IN TWELVE VALUES WITH BLACK AND WHITE

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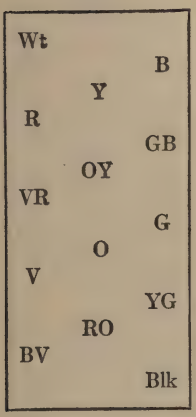

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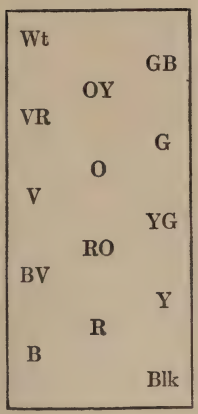

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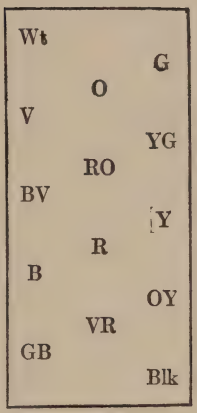

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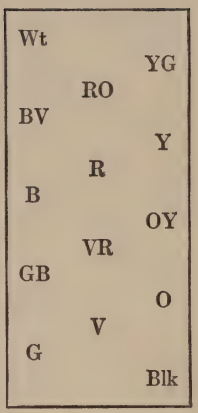

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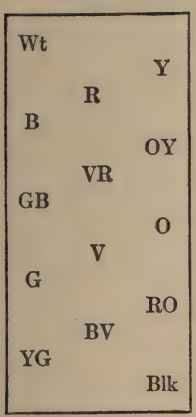

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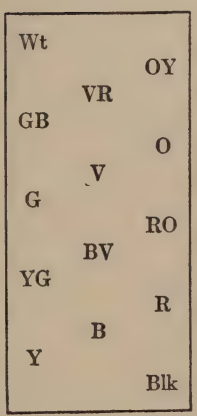

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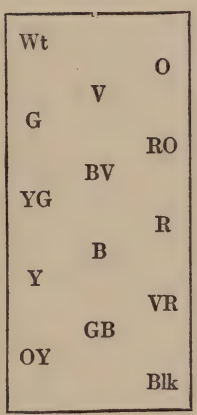

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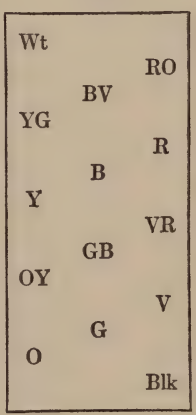

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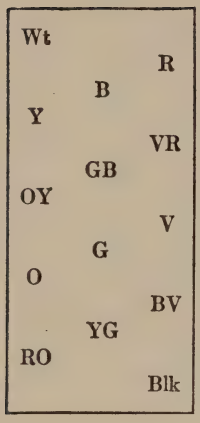

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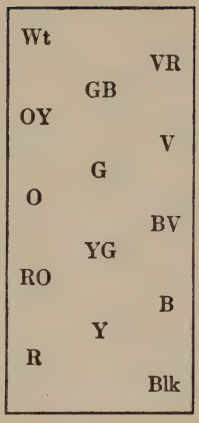

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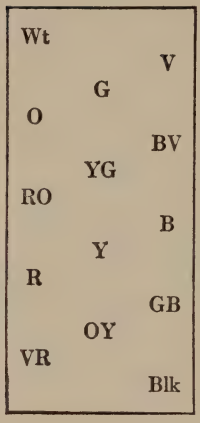

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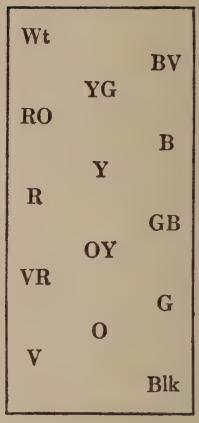

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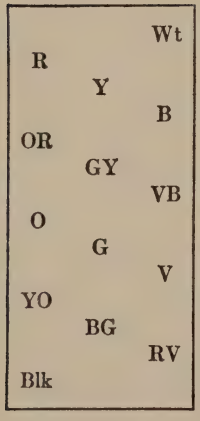

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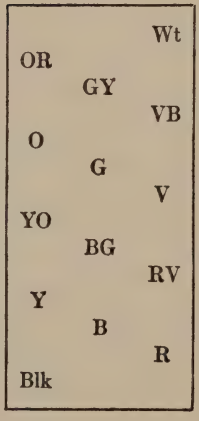

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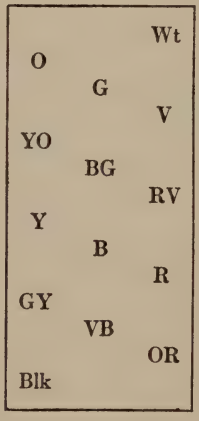

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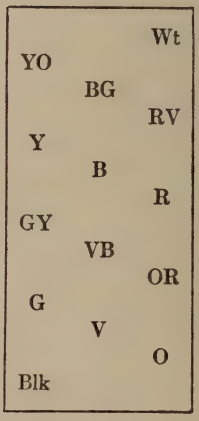

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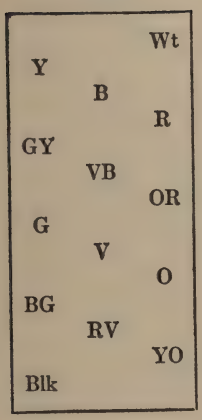

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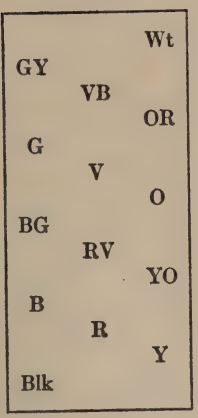

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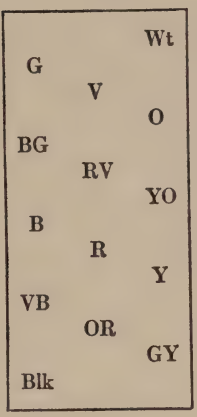

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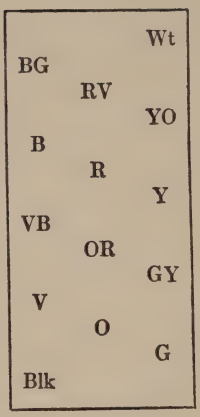

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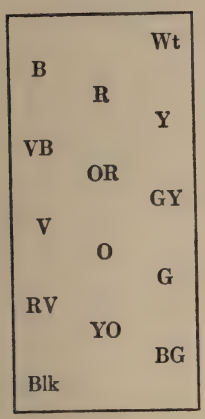

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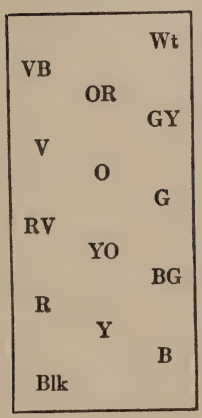

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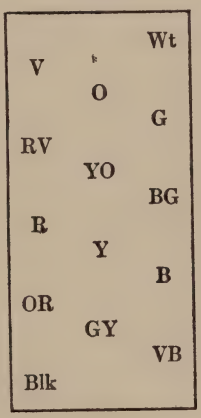

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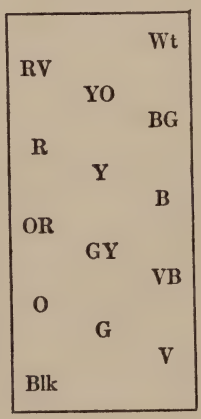

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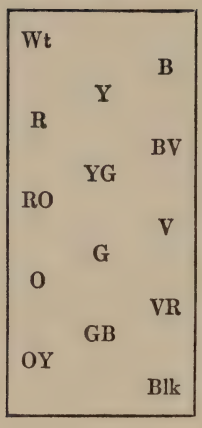

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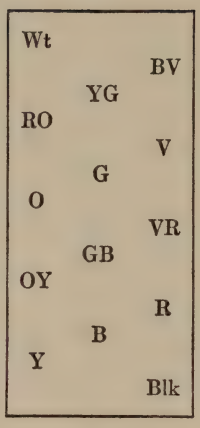

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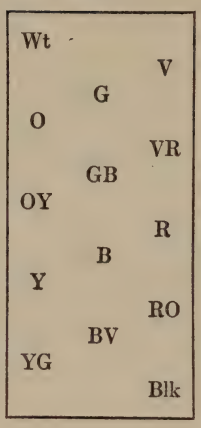

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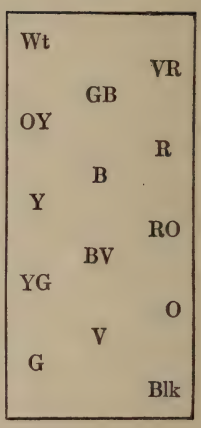

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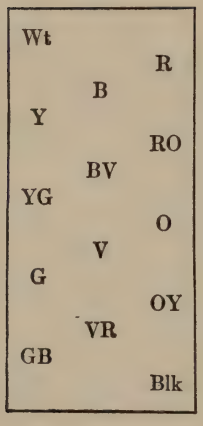

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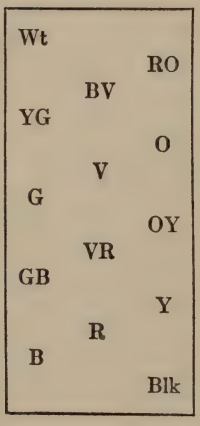

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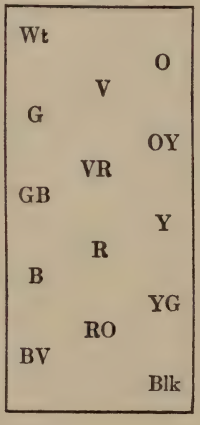

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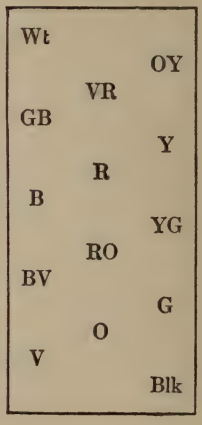

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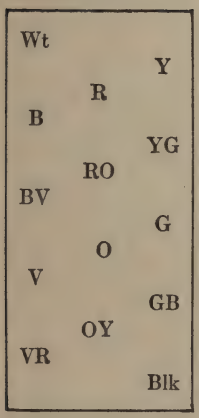

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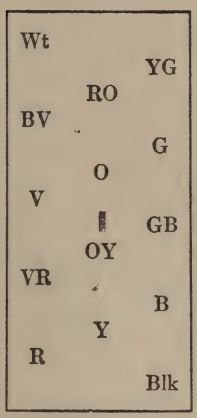

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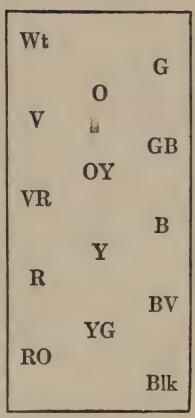

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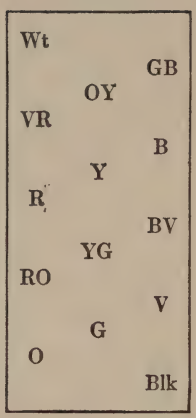

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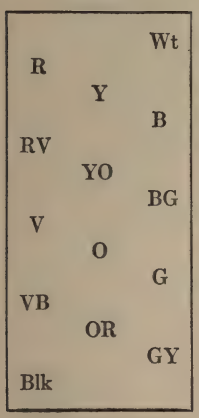

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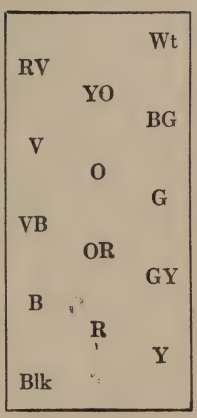

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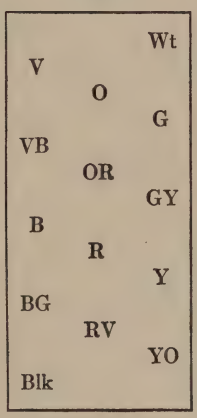

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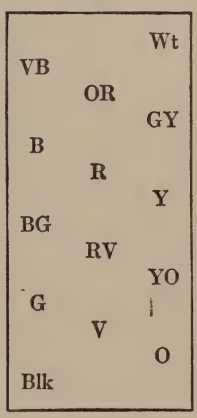

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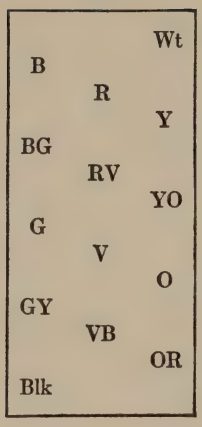

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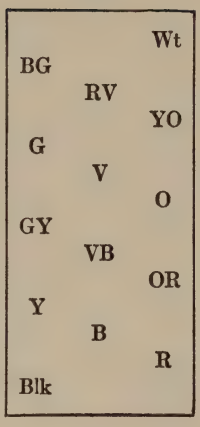

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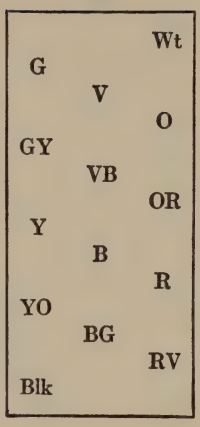

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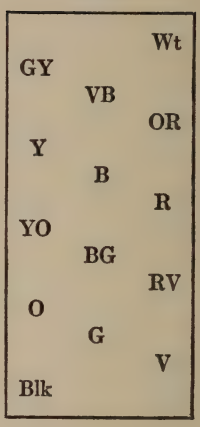

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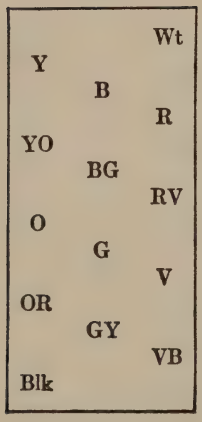

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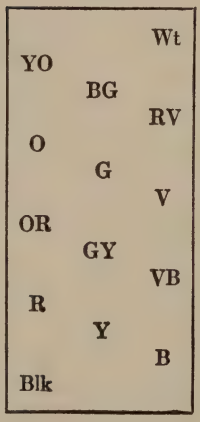

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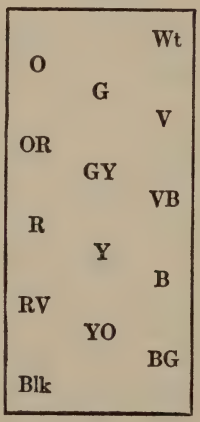

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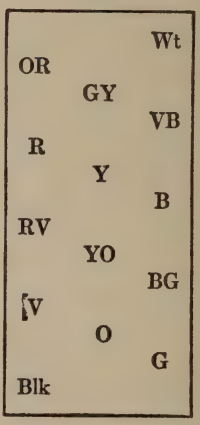

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